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THE IRON WARRIOR

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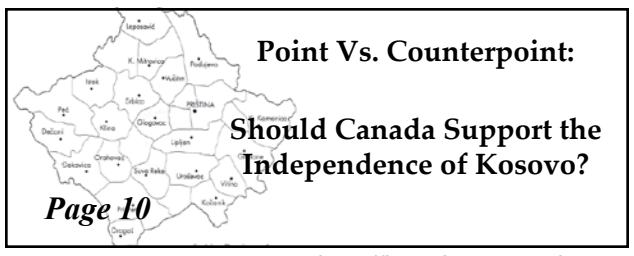


http://iwarrior.uwaterloo.ca

ENGINEERING V PLANS COMPLETE

Parking Lot B Major Focus of Faculty's Long-Term Roadmap

BAHMAN HADJI
4B COMPUTER

The Faculty of Engineering's $150 million expansion plan that *The Iron Warrior* first reported on last June is in full swing. The plan calls for the construction of three new buildings in addition to the Quantum-Nano Centre to fulfill the space needs of the Faculty's Vision 2010 plan.

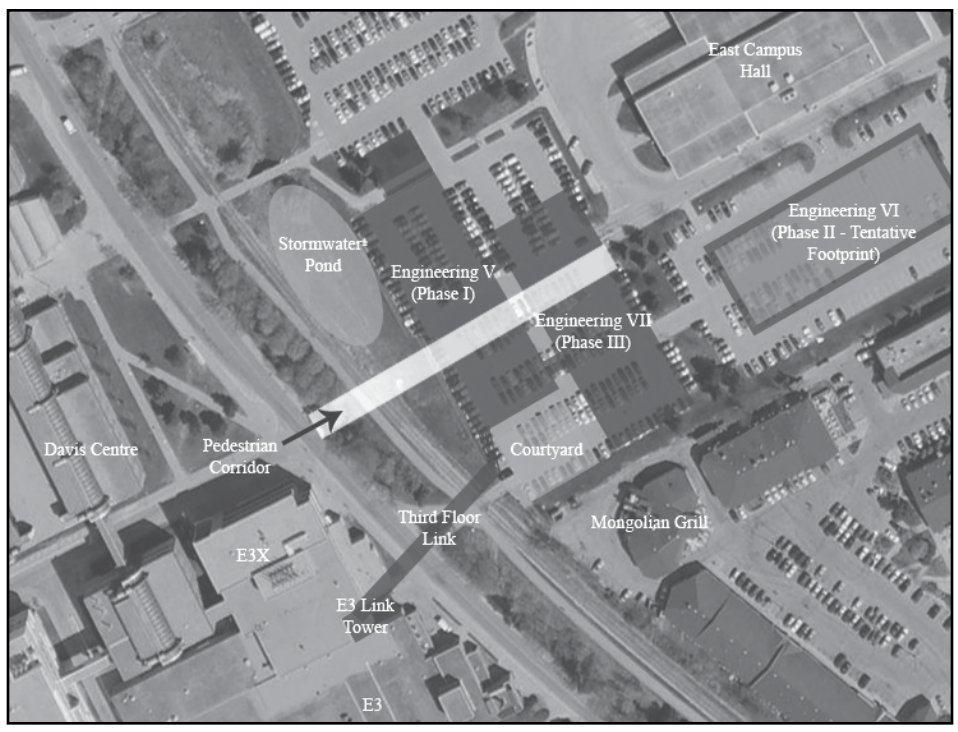
This plan was the result of a spatial review done by Dr. Ron Venter, the independent consultant hired by the Faculty now overseeing the ambitious expansion project. Venter's study concluded that Engineering was in need of an additional 22,000 nasms of space (the unit nasm stands for net assignable square metres and refers only to usable academic space) in order to be able to handle the level of growth it is currently experiencing and plans to experience over the next several years. The solution to this space shortage would thus be achieved with the creation of three new buildings.

The first building, Engineering V (E5), is a six-storey building to be built on Parking Lot B, on the east side of Ring Road. E5 will address space needs for the Departments of Mechanical and Mechatronics Engineering, which will reside on the third floor, Electrical and Computer Engineering, which will reside on the fourth and fifth floors, and Systems Design Engineering, which will reside on the top floor. The bottom two floors will be the much-heralded Student Design Centre (SDC), which will be the new home of the numerous Waterloo Engineering student teams.

The building is in the final stages of approval, with the drawings having gone out for tender in February. E5 will be the subject of discussion at the University of Waterloo Board of Governors Building & Properties Committee on May 8th, and will go forward for final approval to the Board of Governors on June 3rd. If approved, the groundbreaking for the building would take place shortly thereafter. Despite the slight delay, after last year's hopes that construction would begin in March, the target completion date for E5 is still the same as set out initially, as the building is expected to open in January of 2010.

I met with Ron Venter and Sue Gooding, Operations Manager for the Dean's Office, to discuss the future of Engineering's expansion plans. "Engineering on this campus has a long-term plan," Venter stressed, referring to the three-phase plan that will take shape this year with the start of construction on E5, the first phase of the plan.

The idea behind the plan is not just to provide departments within the Faculty with more breathing room, but to also consolidate their identities in specific locations on campus. The first phase is on its way to completion and will attend to the three aforementioned departments. The second phase, meanwhile, is supposed to address the pressing needs of the Department of Chemical Engineering, which currently resides in Douglas Wright Engineering (DWE), the oldest building on campus. Initial plans called for the Department, along with the Dean's Office, to acquire space in a new building in a central location inside Ring Road, likely on the Graduate House green, but the Faculty made the decision to avoid that site for now in favour of keeping to a realistic timeline to meet the pressing space needs of Chemical Engineering. As such, serious consideration is being given to locate Engineering VI (E6) is planned for the east end of Parking Lot B, to become the exclusive home of the Department of Chemical Engineering.



A rendering showing the approximate look of the east side of campus after the completion of the three-phase plan.

The third phase of the plan calls for a twin building, Engineering VII (E7) to be built adjacent to E5, which is designed in a way to allow for E7 to easily integrate and link to it with minimal disruption. The three departments occupying E5 will see their space expand into the adjacent floors in E7 through three corridor links, while the bottom two floors could address parking, Dean's Office, and Faculty-wide space or possibly additional expansion by the departments to be housed within E5 and E7.

The Board of Governors approved Shore, Tilbe, Irwin & Partners as the primary architects for the E5 design. The firm's work includes the Centre for Environmental and Information Technology (EIT), along with many other buildings at campuses across Ontario.

See BUILDING OCCUPANCY on Page 7

32nd Annual Bus Push Raises Money for Needy Children

JAY SHAH
2A MECHATRONICS

In the wee hours of a bright Saturday morning, there was an unusual amount of activity in and around CPH. Engineering students converging, eating donuts, drinking coffee, and, oddly enough, all wearing the same blue T-shirt. A roaring engine churning away just outside CPH – what was a bus doing there? Why was there a thick rope hanging from its front? The bus's digital sign read, "Bus in Tow".

Clearly, if you don't know what I'm talking about, you missed out on what was possibly the coolest Bus Push ever! On Saturday, March 15th, 40 of your classmates and friends pulled a Grand River Transit bus from outside CPH to Benton Street in Kitchener (a distance of approximately 7 km). The annual Engineering Society event now in its 32nd year is a charity fundraiser, with this year's choice being Sleeping Children Around the World (SCAW). SCAW provides children in developing countries with bedding supplies. It takes pride in the fact that no portion of any donation is spent on administration, allowing all of the money raised to reach children in need. For more information, check out scaw.org.

The actual Bus Push was amazing. Despite being physically tiring, spirits were kept high with a combination of Engineering cheers and a backpack with 75-watt speakers (and a car battery and inverter) that I lugged along to provide music to our ears. We were escorted by two police cruisers and a GRT van, helping keep the traffic at bay and ensuring we were safe when pulling through intersections. Onlookers and drivers passing by lent their support by cheering and honking, some pulling out cameras to take pictures of the unusual scene, many more waving and giving us thumbs up. As you can imagine, pulling a bus is hard; pulling uphill is even harder. More unexpectedly, pulling the bus downhill was also very physically taxing, because we had to jog down the hill so that we wouldn't get run over, or have to waste energy applying the brake. And there was no time for even the slightest break – we were always pulling or running. By the time we reached the finish, I can say without a doubt that we were all tired but very satisfied with our accomplishment.

After refreshing ourselves with water, we boarded the bus with which we had just pulled and were driven back to CPH. The Tool and the Tool Bearers made an appearance to commend our valiant effort. We then ran through the Bus Push 2008 banner for picture and video purposes. *The Record* covered this story online and in their Monday paper, as well as CTV who followed us with a video crew during the pull. It is strongly believed that we broke the record for the shortest time to pull the bus to its destination, perhaps more due to the fact that we started on time than our strong pulling muscles – but the record was likely broken nonetheless.

The EngSoc charity fundraiser pulled in $1900 for Sleeping Children Around the World.

The event finished off with some fuel for the body in the form of gyros and falafels, and fuel for the mind in the form of a sitting in the POETS Pub to watch a movie. At the end of the day, we raised just over $1900 – a tremendous accomplishment – and had a great workout to boot! Thanks to everyone who came out. And to those who didn't, I hope you join us next year: It's bound to be busloads of fun!

Letter from the Editor

Engineering Traditions, Pranks, and "School Spirit"

DAVID MORRIS
EDITOR-IN-CHIEF

The final Iron Warrior of the semester is coming out, and it still feels like the term's just started (it would be nice if it was; I'd have a lot more time to study!) I've had a lot of fun running the paper this term, although there's plenty of room for improvement. That being said, I do plan on making a comprehensive checklist of everything you have to do in a week for future Editors-In-Chief, including reminders of who to harass, what to prepare for, etc.

I have accomplished quite a few goals which I've set for myself, however, such as the creation of an Iron Warrior wiki, the purchase of a new computer (quite the beast, if I do say so myself), advertising the paper a bit better (more could've been done on this front, but some got done). The paper will also most likely be in the black this term, a very rare occurrence indeed, and many thanks go out to the Sanford Fleming Foundation for their continued support of the newspaper.

This last issue has been a whopping 20 pages long, and made for quite the interesting layout. Just like Issue 1, articles came in far too late, and I had to do a large amount of juggling to get things to fit together – layout editing is almost like a jigsaw puzzle, with articles and pictures instead of pieces. Thanks to the fact that so many articles came in late, and that there were 20 pages to deal with, this issue took a very long time to make, so I hope you can enjoy it to its fullest as you procrastinate right before an exam. A word of advice for anyone who ever has to assign people deadlines: assign them ahead of when you want them, with the fact that they'll submit it late in mind, and enforce these deadlines so that people will go through with them.

This issue would not have been possible without the help of Bahman Hadji, Stuart Pearson, and Sunny Ng, as many thanks go out to them for helping me late into the night writing articles and planning layout. Thanks also go out to my entire staff, for putting up with me during some of my more sleep-deprived moments, and coming to meetings no matter how short-term they might be organized.

Speaking of staff, two awards will be given during our final meeting of the term: the Iron Pen award, and the Editor's Award. The Iron Pen is awarded to the person who contributed the most to the Iron Warrior, article-wise, with the award going to Bahman Hadji, who had written 7 articles throughout the term, with a total wordcount of 7,613. The Editor's Award is awarded to the person who helped out the most with the paper, and showed enthusiasm throughout the term about the paper. I am pleased to announce that Stuart Pearson won this award for helping out with the paper whenever help was needed, and for writing many excellent articles.

Finally, I'm happy to announce the new editors for both the upcoming Spring '08 term, as well as the Fall '08 term. Sunny Ng will be running the paper during the summer, and although he hasn't been involved for too long, I have no doubt his enthusiasm for the paper will pull him through the term with a bang. For the Fall term, and the term most of us will be returning to school for, Stuart Pearson will be taking on this prestigious and time-consuming role, and it seems that he has quite the vision of how he wants the paper to be, so I'm really looking forward to seeing the direction he takes it. He will also be the first Civil EIC in four years!

Engineering Traditions and Pranks

Even though we're in one of the most vigorous programs in University, engineers are (in)famous for their traditions, ability to party, drink, and pull pranks. To be quite blunt, very few faculties have histories that can compare to that of an engineering faculty's. However, this may be deceptive on our part; generally a minority of engineers make up this voice that the public hear. So why are engineering traditions important? Why, as a student, should you care about yelling and waving at a gigantic wrench, or try to build a car in a washroom?

The simple answer to this is two words: school spirit. Of course, we've all heard this term thrown around constantly in high school (and university), and it's pretty much lost most of its meaning along the way. So, the rest of this editorial will be devoted to the value of "school spirit", and of various pranks that have been pulled by engineers in the past (for those who seek inspiration).

The first and foremost reason why "school spirit" is important is because this is pretty much the only chance you'll be in an environment filled with people your own age, with similar interests and an extremely wide variety of competencies. Think of yourself in five years, once you have a job, and are working in a city that will most likely not be Waterloo. How many people will be willing to attempt to build a brick wall across a road? How about a gigantic hot-air balloon with "ERTW" painted on it? Chances are, most of your co-workers will be of a variety of ages, and fairly set in their ways. But as you're reading this right now, you're probably thinking "Hey, building a gigantic hot air balloon does sound pretty cool", as will many, many other engineers around this school.

This unique social setting is, in fact, a unique opportunity that you'll never run across again, and this applies not only to things like co-ordinating the painting of a rooftop (with water-soluble paint, of course), but also to your entire social life. This is the chance you'll get to meet many, many people who think like you, and share similar interests as you, and "school spirit" (parties, clubs, volunteer-positions, etc.) will help you meet these people. It was my goal to try to expand myself socially as much as possible (I was rather anti-social during high school, sticking to the Internet instead), and it's worked out incredibly well, thanks to all of the events run by EngSoc, as well as the many volunteer events at which I've earned T-shirts.

Another good reason for having some "school spirit" is to improve the reputation of our university, and thereby increase the value of our degree (bringing along with it personal bragging rights.) A university with students who are known to give back to their communities will also get more sources of public funding and donations, helping to enrich their undergraduate experience.

In my humble opinion, pranks and traditions are the most prominent way of displaying "school spirit" to the entire world. Many engineers from other universities know of The Tool and scheme to steal it from its Bearers' iron grasp, and residents of Toronto have the honour of hearing UofT's Lady Godiva Memorial Bnad (not a typo), in all of its off-tone glory.

UBC engineers are extremely prominent prankers, and have even gained national media attention during an extremely famous event. In the middle of the night, a crack-team of engineers infiltrated the Golden Gate Bridge in San Francisico, armed with an extremely high-strength cable and a red Volkswagen beetle. They then proceeded to hang the beetle off the eastern side of the bridge, and sped off into the night, completely undetected. The spectacle caused a huge commuter tie-up, and generated a large amount of media attention and fame for UBC. UBC engineers have even pulled a prank on the outside of one of our engineering buildings, the remains of which can still be found today through the display of a nifty plaque.

We Waterloo engineers have also had some extremely impressive traditions in the past. One of the more questionable of these traditions (which died long ago) involved the engineering society hiring a stripper to ride naked, on a horse, across campus. There was also a famous incident where the water tower closest to campus was painted to read "BEER", a feat that still baffles the majority (if not all of us) to this day. POETS also has many pictures of amazing engineering achievements; a gigantic ERTW blimp, a car balanced on a pole, and even the aerial photos taken every frosh week are all quite the spectacle to behold; I highly recommend you tour around and see them for yourself.

One tradition that many of you probably ran across this term was the IRS celebration, where all the (hopefully) graduating fourth-years dress up, decorate the engineering buildings and interrupt classes in a scheduled, organized manner (professors must be told ahead of time if their classes will be interrupted.) For many fourth-years, this is a celebration of the five long, hard years they put in, and a spectacular "goodbye" to their favourite (and least favourite) professors and administrators.

There is one other reason to pull pranks: to maintain traditions. It's a rather simple reason, but I, personally, feel that most of life should revolve around that reason anyways. It's because they're fun to do, and are extremely satisfying to look back upon.

Corrections

In the March 12, 2008 issue of *The Iron Warrior*, the Letter from the Editor stated that the Spring '07 Issue 5 was never published. In fact, Spring '07 Issue 5 *was* published; the statement should instead have read that the Fall '07 Issue 5 was never published. The Letter should have also noted that WEEF funded the new computer that was recently purchased by The Iron Warrior.

Finally, Mo Jangda was not listed under contributors though he should have been; he provided the photo for the Larry Smith lecture article.

The Iron Warrior regrets these errors.

This is the final issue of *The Iron Warrior* for the Winter term.
Thank you for your readship, and look out
for Issue 1 of the Spring term in late May.

THE IRON WARRIOR

The Newspaper of the University of Waterloo Engineering Society

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The Iron Warrior is a forum for thought-provoking and informative articles published by the Engineering Society. Views expressed in The Iron Warrior are those of the authors and do not necessarily reflect the opinions of the Engineering Society.

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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Career Advice from Larry Smith

SUNNY NG
3B COMPUTER

On March 12th, hundreds of students packed into the Davis Centre for another open talk by legendary Economics professor Larry Smith. The topic of the talk, hosted by the Engineering Society, was "Strategies for Career Success in Good Times and Bad". It focused on how past UW students and graduates have achieved career success after graduation.

After an introduction by EngSoc President Tyler Gale, Larry Smith began by touching on how the job market has changed over the years. He explained how before there used to be a normal distribution of quality of jobs, where jobs that were good and bad were rare, while most jobs were considered in between. Nowadays, there seems to be a dual-distribution over the quality of jobs, where there are more jobs that considered being "good", same with jobs that are considered to be "bad", with few in between. He explained how before, jobs that were considered bad were because of poor income, lack of excitement and small chances of advancement. However, some jobs are considered bad today because employees are overworked.

Currently, most people's plan after graduating from university is to get the best job they can find. Then they would hold on to their job, and then find the next best job or get promoted. Larry Smith stressed on the importance of having a career goal. This would give you a direction of where to go next after your first job.

One of the challenges for graduates today is the rising competition in various fields. Larry Smith explains that in order to not become lost in the competition, one must differentiate oneself. Just defining what occupation you would like to take on is no longer enough in today's world. He continued on by offering tips on how to accomplish this. First, one must plan continuously. Then, one should define his or her own interests. From there, one should specify the interest to focus on. Such as, what special knowledge or skill do you have and what knowledge or skill would you like to gain? After that, one should try to obtain that special knowledge or skill specified. Of course, the above all sound great on paper, but how does one actually accomplish this? Do research. This can be done through searches, such as academic databases or non-digital sources. It can also be done by reading. This includes reading every issue of publications such as Fortune, Business Week, the Globe & Mail, Wall Street Journal, and industry-specific publications. Talking to others with ideas or experience through networking is another good idea. Lastly, one can think by him or herself quietly without distraction for some ideas.

Larry Smith gave an example on how typically people have the wrong emphasis when trying to determine a career base. For instance, if your career base is a specific occupation, then your goal is too broad. Conversely, if your career base is working for one particular company, then it is too specific. Instead, you should focus on a particular expertise, technology, or economic activity. It is important to note that your career should be broad enough to still have perspective. Otherwise, you're basically a technician. For instance, if one were to focus on being a fibre optic specialist, then one is being too specialized. The downside to this is that while you may be needed in the market today, five or more years down the road, the market may become saturated and you would have trouble finding another job.

While many people may base their job choices based on the size of employer, Larry Smith mentioned how this should not the deciding factor of selecting a job. He explains how larger companies can be deemed boring, lack of innovation, smaller chances of promotion, increased pressure, and termination based on arbitrary standards. Small companies have the benefits of being innovative and interesting, so one can learn more. However, this comes at the cost of having limited resources in the company, as well as a risk of failure. Medium-sized companies have the worst of the both worlds.

At the conclusion of his talk, Larry Smith touched on some very helpful advice for those of us who may be going through some bad times of uncertainty. While it may seem obvious, it is important not to panic. If necessary, one should delay making decisions in order to not make the wrong choices. Also, avoid short term jobs that are locked. Instead, do contract work. If things don't work out, consider staying in school. That includes perusing another undergraduate degree or stepping into graduate school. If you are considering getting into graduate studies, it is important to pick the right research. Remember that you are not looking for more education at this point. Try your best to solve a high profile important problem. That way your research will be known and hopefully more opportunities will come your way.

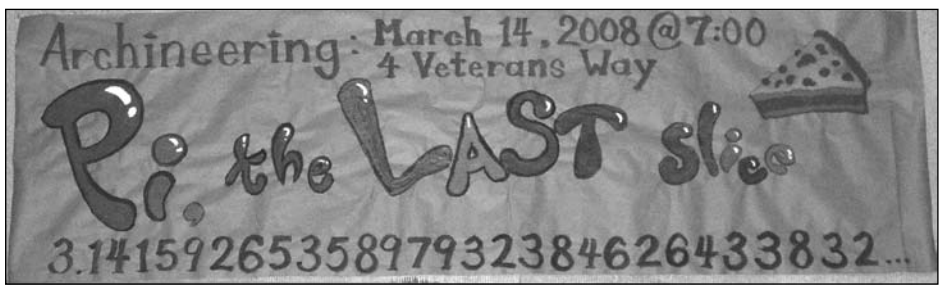
Archineering Brings WASA and EngSoc Together in Cambridge

STUART PEARSON
1B CIVIL

March 14th (3/14) is a special occasion for anyone a penchant for math. Adopted as "Pi Day" here on campus and around the world, it is a chance to express one's love of irrational numbers and maybe even get some free pie from the Math Faculty if you're lucky. However, while the Math students were busy holding pi-recitation contests (How many digits can *you* name off the top of your head? *3.14159265... I give up*) the engineers were running the coolest Pi celebration in the University.

16 engineers undertook the journey to Cambridge for the night to party with students from the University of Waterloo's School of Architecture. Architecture is officially a part of the Faculty of Engineering, but the logistics of commuting to and from Cambridge means that their students are often unable to partake in events held by the Engineering Society on the main campus. Despite the inconveniences of the distance, it is important to stay connected, so the first ever joint event between EngSoc and WASA (Waterloo Architecture Students Association) was held.

It was a 40 min bus ride into Cambridge, the cost of admission being one canned good for the Food Bank. The event was held at the Galt Royal Canadian Legion, located just across the Grand River from the Architecture Campus. A "Battle of the Bands" competition was initially planned for the evening, but was cancelled due to a lack of performers. The night was essentially a dance, with a DJ, cash bar, and in conjunction with the theme of the day, an interesting visual display showing different types of pie.



At the outset of the evening, the engineers and architects did not interact much, preferring to stay within their own respective groups. However, as the night wore on, everyone began to mingle, and it seemed like a good time was had by all.

The Tool arrived partway through the evening with its usual fanfare. Architecture students, who do not receive iron rings upon graduation, will never have the privilege of touching our mascot. Over a dozen curious Architecture students tried to touch it, but were met with the steely resolve of the Toolbearers and soon ceased their attempts. Aside from meeting The Tool during Frosh Week, the architects hardly ever see it, so many of the students are indifferent to it. One Architecture student commented that it was "just a big wrench", which may be true, but it's our big wrench, dammit, and it deserves some more pride.

For any male engineers who need enticement to come out to the next such event, consider the following: within architecture, the male-to-female ratio is essentially the inverse of what it is in the rest of Engineering. Approximately 75% of the night's attendees were girls.

Archineering was a great opportunity to get off campus and make some new friends in Cambridge, so one can only hope that there will be more such events in the future. Thanks goes out to everyone who showed up, and especially to Dave Halford for making the night possible.

Engineering Jazz Band Charity Gig

SUNNY NG
3B COMPUTER

Yes, it's your unofficial Iron Warrior Engineering Jazz Band correspondent writing yet another article hyping the engineering jazz band, With Respect to Time. Since the last issue of Iron Warrior, the band has impressed approximately 240 Artsies when they played at the reception of the Arts Gala Formal on the night of Friday, March 14 at the Waterloo Inn, showing that engineers mean serious business when it comes to music! This was the first time the band has played in an event for a student society outside of engineering and the response from the crowd was simply overwhelming. The band also played at Fed Hall just this Tuesday for the reception of the Federation of Students' Volunteer Appreciation dinner.

As the end of the school term is quickly approaching, With Respect to Time is getting even busier promoting themselves inside and outside the faculty. This coming Friday, the band will be putting on a performance during Warrior Weekends at the SLC Great Hall at 10pm. Come for some great music as well as mocktails and for some fun as it is Casino Night! Furthermore, With Respect to Time will be making an appearance at one of the EngPlay performance nights next week. As of the publication of this Iron Warrior issue, the date at which WRTT will perform for EngPlay was still to be determined. For the latest updates, check out our website or our Facebook group.

Of course, the main event to lookout for when it comes to With Respect to Time is the end-of-term charity concert. This term's concert will be held at 7pm in Hagey Hall on Tuesday, April 8, 2008 - the day after lectures end. Tickets are $10 and can be purchased at the Hagey Hall Box Office. All proceeds from this show will benefit the Food Bank of Waterloo Region in addition to the Waterloo chapter of Engineers Without Borders. This term's show will be hosted by Matt Colautti of 4B Tron, who is known for dishing out entertaining jokes while MC-ing past concerts for previous terms.

The band is very excited and has been looking forward to this event since they first got together for this term in January. Through intensive and long weekly rehearsal and sectionals, they're getting ready to wrap-up the term and show you what they're all about. So be sure to come on out to support the band and the cause, and enjoy some great jazz music as well as some refreshments!

Be sure to check out their website at www.engjazzband.com as well as their Facebook group to get the latest scoop as well as to check out photos and videos from past performances!

Our Unique Newspaper – Since 1980

BAHMAN HADJI
4B COMPUTER

Every Waterloo Engineering student over the past three decades has had the chance to read a copy of the official newspaper of the Engineering Society, The Iron Warrior. Most have taken the time to read an issue or two, whether to stay informed on the news or keep entertained by doing a crossword. Some have contributed articles, while some have even taken the reins and run the newspaper for a whole term as Editor-in-Chief. But why is it that the University of Waterloo is the only school in Canada with a full-length Engineering newspaper that has a serious focus while being published regularly year-round and run entirely by a volunteer staff of students? To answer that, you have to look all the way back to the beginnings of UW.

Back in 1957, when UW was in its infancy, Engineering was its only faculty. Shortly after, the students of the Faculty of Engineering formed the Engineering Society, now the oldest student society on campus, which was at the time a mostly social organization that would not get a constitution for another 14 years. Many things were different back then: A-Soc and B-Soc were referred to as A-Term and B-Term, and terms were three months long instead of four. As the Engineering Society became more structured, it became able to financially support a publication (while advertising revenue also covered a portion of the cost). And while the origins of The Iron Warrior don't go back that far, the roots of the first Engineering Society publication, Enginews, date back to those early days.

Enginews was originally started in 1959 as a newsletter to keep students informed about events. It eventually folded into the campus newspaper, The Coryphaeus (later The Chevron), but made a return in 1967 amongst complaints that The Chevron was not serving students or representing their views. This reborn version of Enginews was wholly different: It was meant to be a humorous and irreverent publication. It was published several times throughout the term, contained a questionable mix of news and humour, was the self-proclaimed "best and most exciting (and frequently most disgusting) publication on campus," and claimed to represent the uncensored image of the engineer.

Indeed, its tongue-in-cheek content was criticized by some as being sexist, racist, and generally offensive. While at one time Enginews was distributed all throughout campus, by the late '70s and into the early '80s, the Engineering Society became more mindful of its content, and its distribution was restricted to Engineering students – spawned by complaints from students from other faculties and administration. It even attracted national attention in 1983 when a female employee at the printing plant where Enginews was published took offence to its content and refused to do her job, being fired as a result. In 1985, Enginews was finally shut down, never to be officially resurrected. This action actually brought good publicity to UW, as it became one of the first universities to axe its crude Engineering student publication.

The most obvious reason for the death of Enginews over 20 years ago is that its content *was* offensive to a wide variety of people, including Engineering students, and not just because they didn't "get" the content, but because it stereotyped engineers as crude, drunken hooligans. But there is also a deeper reason. Satirical and humorous content does not have to be offensive, even if it is about a "touchy" topic. The problem is that it is not viable to produce a high-quality humorous publication on a regular basis. As a result, to fill content, the editor of such a publication has to resort to lowering its editorial standards, resulting in the type of low-class content that puts the paper in the gutter. The simple fact of the matter is that a tasteless student newspaper that is trying to be funny reflects badly on the editor, the students, the school, and engineers in general.

It was in the shadows of Enginews that the Engineering Society decided to begin publishing The Iron Warrior back in 1980. "A Forum for Engineering Concepts" is what the original masthead contained, and at the onset, the newspaper was published twice (and shortly after three times) each term, containing informative articles about the on-goings of UW and features on the profession of engineering. It quickly blossomed and found a large readership, with its content ranging from opinion pieces on current affairs and social issues, to features on student entrepreneurs, professors, student teams, and Engineering Society events, to outspoken editorials, to even cartoons and humour, done the right way. It quickly became apparent that a newspaper like this, without the pressure of trying to be funny, was more feasible to be printed regularly, served a wider audience, and promoted a better impression of students, the school, and the Engineering Society. As such, the resources (monetary and otherwise) of the Engineering Society were and continue to be well-spent on a professional publication.

In the five years that The Iron Warrior co-existed with Enginews, the Engineering Society supported both publications, but as the latter started to fall out of favour with most, the former began to win praise from students, faculty, the University, and even Deans of Engineering at other schools. While Enginews was cutting back its distribution, The Iron Warrior began distributing copies to other faculties' buildings. In 1983-84, it even began to receive attention from Imprint, UW's official student newspaper. Nathan Rudyk, an Imprint staff member and Arts student, wrote a letter to the editors of The Iron Warrior and Imprint as well as the President of Engineering Society "B". The letter shows what a refreshing impact the publication had at the time, and how it radically changed the way people thought of the students in this faculty:

Having just read the Nov. 24 [1983] issue of the Iron Warrior, I want to congratulate [the staff] for a fine paper. Events, investigative reporting, and human interest stories were all of high quality and made a very vital, engaging impact as I flipped through the pages. Not once was I persuaded to think engineers are assholes as I frequently have been by other student engineering publications. . . . It's too bad Imprint doesn't have the type of reporting so prevalent in the Iron Warrior. The 20-page Nov. 25 issue of Imprint has 1 page of news of any kind. I would invite contributions [from the staff of the Iron Warrior] to the Imprint. Believe it or not, engineering news is often campus news. So until the Imprint sees more of these contributions, and even if it does, I'll be reading the Iron Warrior.

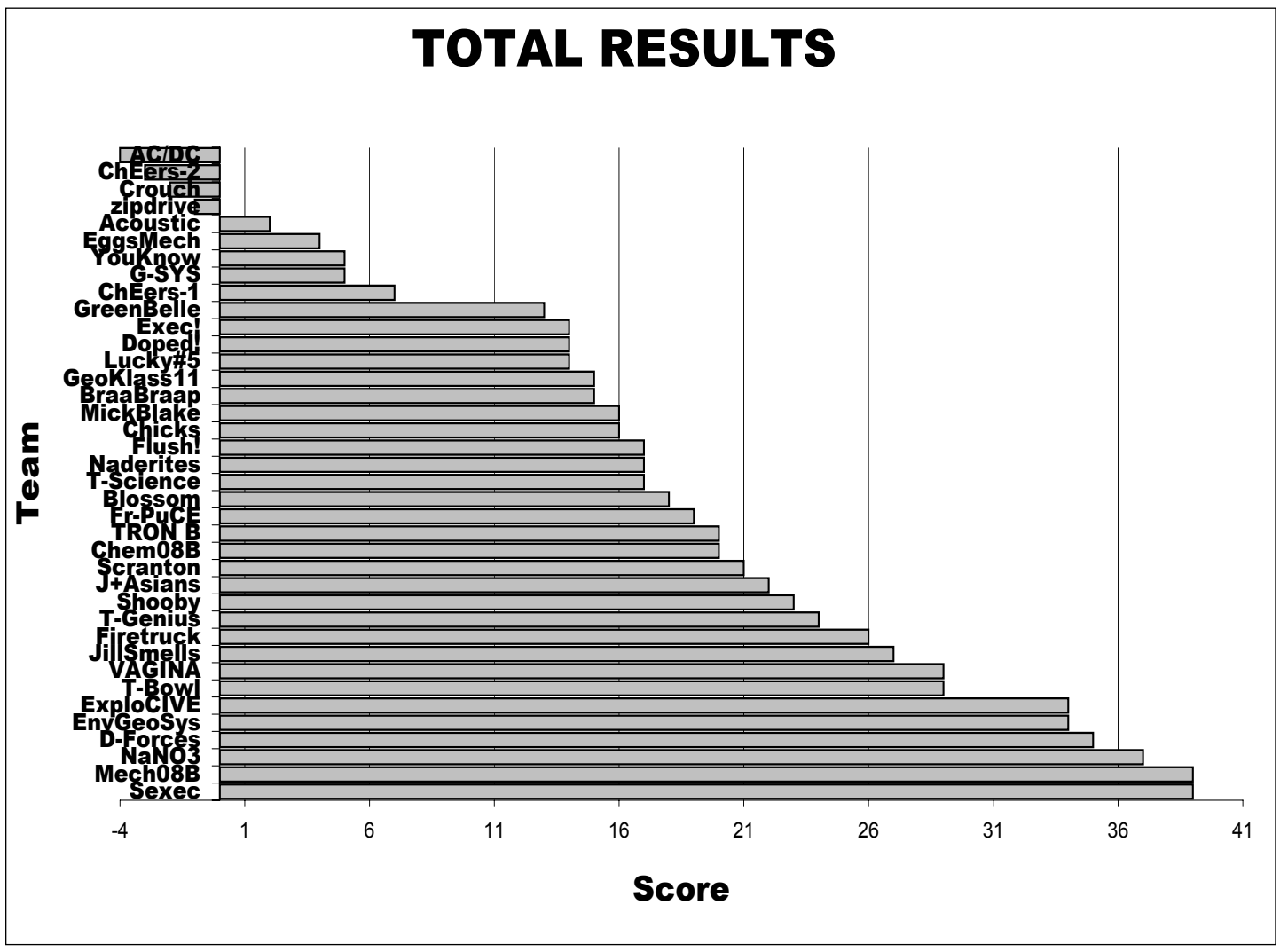
It was this standard which was set almost 30 years ago that The Iron Warrior has tried to maintain over the years. Copies of the newspaper are distributed to many buildings on campus (though circulation is only 2000 due to the paper's limited financial resources) and sent to engineering societies and Deans of Engineering at other schools, and other persons of interest. The Waterloo Engineering Society seldom receives publications from other engineering societies, and, as I found out as a delegate at a conference of national Engineering schools (CFES Congress 2007), it may be because most other schools' engineering society publications are either in the Enginews mold (they would rather keep it to themselves to avoid the fate of Enginews), or not relevant enough to warrant distribution beyond their own student population.

It is for this very reason that The Iron Warrior, which was another innovative Waterloo idea, is unique and stands out among its peers. The fact that each year sixteen full-length issues of a newspaper can be produced with a miniscule budget and fully volunteer staff speaks volumes about Waterloo Engineering, and gives students, faculty, and staff alike something to be proud of.

As you leaf through the Iron Warrior archives, you realize that there are some traditions that just don't die for generation after generation – and at the University of Waterloo, a quality Engineering student newspaper is one of them.

Genius Bowl XII Huge Success with Record Turnout

ALLISON CRANSTON
2A GEOLOGICAL



The standings going into the Waterloo Round, when the teams were broken up into tiers. The Mech08B team beat out the Sexecutables, Disturbing Forces, and $NaNO_3$ in the top tier to capture Genius Bowl XII.

The twelfth installment of the popular trivia competition Genius Bowl was a success with a record 39 teams participating and a turnout of over 200 students. The results were close but it was the 4B Mech Eng '08 (B) team who were victorious for the third time and took home the $120 prize, unseating the 4B Mechatronics '08 team, V.A.G.I.N.A., and the 4B Chem Eng '08 (A) team, who had won the previous two Genius Bowls respectively. Not far behind were the 4B Comp '08 (A) team, the Sexecutables, the 1B Nanos, Team $NaNO_3$, and the 3B Mech '09 team, Disturbing Forces. This term's spirit award went to the 2A Geo '12 team, Geo Klass ov E11even Teem, who showed up in full superhero attire complete with matching T-shirts and capes. With the fourth-years graduating this year, this was the last chance for the 2008 classes to compete, and they go out having won seven times.

Genius Bowl XII also saw many format changes brought on by the Directors. During the three regular rounds, contestants had the opportunity to answer follow-up questions which made questions worth double the points if answered correctly, but would wipe out any points earned from answering the first part of the question if answered incorrectly. There was also an extra Death Round in the competition, requiring more knowledge of list-type questions. Yet another change to this year's format was the opportunity to wager points during the Jeopardy Rounds after hearing the category of the question, which increased the amount of strategy involved in the competition. This year's Directors also opted to introduce a tier system to the final round. This rule change was made in an effort to spread some of the prize money around, and encourage participants to stick around until the very end. Before the final round, teams were divided up into tiers of four based on the current standings. The final round was University of Waterloo-themed and tested teams' knowledge of campus, staff, faculty, and university history. During this final Waterloo Round, teams were competing against the other teams in their tiers, and the top team within each of the ten tiers won an impressive $6 prize – the exception being the top tier, for which the winning team claimed the top prize.

There was however, some hostility when it was announced that Round 4 would be altered from its original 15 questions to a more "artistic approach". Those of you who attended Genius Bowl XII will know that teams were asked to draw a picture to amuse the judges. The Directors would like to assure you that Round 4 was not simply "scrapped". There never was a Round 4. With nearly 40 teams, the added follow-up questions, the expanded Jeopardy Rounds, and the extra Death Round, Round 4 was put into place to give our hard-working judges a chance to catch up, and for the standings to be tallied. Even with this change, the marking time was tight but with a few timely "jokes" and even a little dance from one of the Directors, things were right back on track.

So, all-in-all, it was a great night. This term's Directors would like to extend their most sincere thanks to all of the teams who participated and to the judges, Amanda Pileggi and Andrea Myles, without whom they never would have been able to pull off the event.

POINT VS. COUNTERPOINT

Should Canada Support the Independence of Kosovo?

POINT

STUART PEARSON
1B CIVIL

On February 17th, Kosovo's parliament unilaterally declared independence from Serbia by a vote of 109 to 0. Germany was the first nation to recognize them on February 28th, and by a month later, 33 of the 192 United Nations member states had followed suit.

The United Nations itself has so far failed to come to a consensus on the matter, waiting for the five permanent members of the Security Council to weigh in on the issue. The United States, United Kingdom, and France have all supported Kosovo's endeavour, although China has expressed concerns over the move, and Russia has outright condemned their actions.

Other major international organizations including the European Union and International Olympic committee also have yet to formalize their positions.

On March 18th, Canada finally came to a decision, announcing its support for Kosovo's independence. Critics of this move worry that in declaring support for Kosovo, it sets a precedent for other groups seeking independence, including Quebec separatists here in Canada.

However, Prime Minister Stephen Harper was quick to dismiss anyone who argued that the decision to recognize Kosovo as an independent nation laid the ground for future secession by Quebec. When Quebecers have wanted to separate from Canada in the past, referenda were held. In 1980, the first referendum resulted in a win for the "No" committee against sovereignty by a vote of 60% to 40%. The second referendum held in 1995 was a much closer race, and in the end, the people of Quebec decided against leaving Canada by a margin of only 0.6%. However, recent polls show that support for a sovereign Quebec has dropped beneath 37%, making their separation in the near future seem unlikely.

There are few parallels between Quebec and the situation in Kosovo. The Balkans have been war-torn for centuries, and the current conflict in Serbia has been raging since 1998. The Albanian majority within Kosovo have long faced injustice at the hands of the Serbs. The last time Kosovo made an attempt at autonomy, Serbia responded by rallying the troops and suppressing the Kosovars. Ethnic cleansing during 1999 reportedly displaced over one million people and resulted in over 11,000 deaths. NATO eventually intervened during the Kosovo War in 1999, resulting in the withdrawal of the Yugoslav military from Kosovo, although this failed to offer much reprieve from the violence. With such a turbulent past, it is hardly surprising that Kosovo made its move for independence.

When Serbian Ambassador Dusan Batakovic abandoned his post in Ottawa and returned home in protest, he argued that Canada would not be so sympathetic if they were in Serbia's shoes and other nations began to recognize Quebec as a separate entity. However, in their declaration of independence, Kosovo makes it clear that they constitute "a special case arising from Yugoslavia's non-consensual breakup and is not a precedent for any other situation." Their main case for seceding from Serbia lies in the years of abuse that they have endured, so such a plea would not be nearly as effective for Quebec. Aside from the Front de Libération du Québec crises during the 1960s and 1970s, Quebec's push for sovereignty has rarely manifested itself in violence.

Given the difficulties faced by the people of Kosovo in recent years, and that their unique case does not set any sort of precedent for Quebec's departure from Canada, it would seem that acknowledging Kosovar independence is a move in a positive direction. Simply declaring their intent to leave Serbia will not solve Kosovo's problems overnight. However, it is the necessary first step on the road to achieving full autonomy, and with international support from nations like Canada, it will make their difficult journey slightly easier. The road may be long, but the will of the Kosovar people is strong, and now that the gears are in motion, they may have a brighter future to look forward to.

Editor's Note:
Point Vs. Counterpoint is a feature meant to stimulate discussion on thought-provoking topics. The views and opinions expressed here do not necessarily reflect those of the authors, *The Iron Warrior*, or the Engineering Society.

COUNTERPOINT

SUNNY NG
3B COMPUTER

Last Tuesday, Canada has finally decided and made the controversial move of formally recognizing Kosovo's unilateral declaration of nationhood. Canada has now joined the United States, Japan, Britain and most of the European Union in recognizing the state's independence from Serbia; while Russia, China and a few other European Union states including Cyprus and Spain sided with Serbia in opposing Kosovo's move.

The Albanian-Kosovo leaders have been talking about having independence for the longest time, but it never occurred to me that it would actually be recognized by other countries because it wouldn't be legal in context of international law. However, it did happen and they managed to gain support from the US and most of their loyal allies. Many other countries have not supported this move or have not decided what to do. While Canada has just recently decided to support Kosovo's independence, we really should not have. Sovereignty needs to be respected.

Let's not forget that it was only thirteen years ago that the referendum over the sovereignty of Quebec took place in that province. For those of you who don't really remember what happened, the referendum asked voters in Quebec whether it should secede from Canada to become its own independent state. The referendum was narrowly rejected by a slim margin of 50.6% to 49.4%. If we were to recognize Kosovo's unilateral declaration of independence, what message are we sending? Are we saying that if there is to be another referendum in Quebec in the future on its independence and it managed to narrowly pass; we should be recognizing that too? By recognizing the independence of Kosovo, we are setting an unfortunate precedent over such practices.

As an international community, we are also applying a double standard to this issue by recognizing Kosovo's independence. Back in the 90s, declarations of independence of the Serbian "Republic of Krajina" in Croatia and the Serbian "Republika Srpska" in Bosnia were shunned internationally, leaving around 700,000 Serb refugees in Serbia from the mentioned nations. As a result, Serbia now has the largest refugee population in Europe. By letting Kosovo separate, these numbers will only increase.

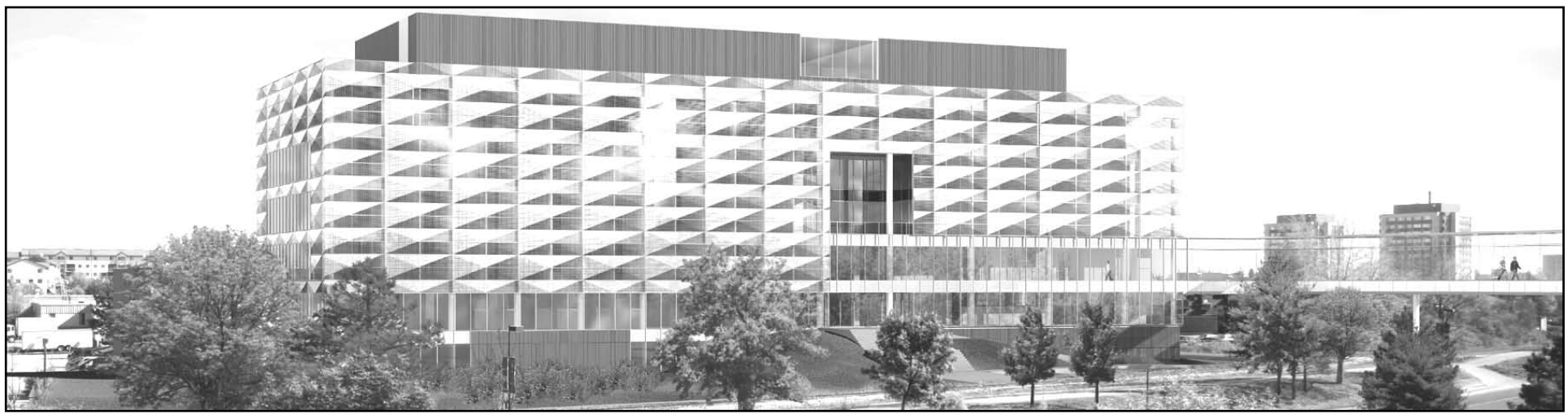
For the longest time, the Serbs have been portrayed as the bad guys by the Western media. They were accused of crimes that involved in ethnic cleansing of the Albanian population in the region. But the sad truth is that these genocide actions were perpetrated by both Albanians and Serbs against each other. Just look at Kosovo's demographic for proof; the Serb population in Kosovo experienced a dramatic drop. Moreover, even the current Prime Minister of Kosovo was once considered a "terrorist." He was a leader in the Kosovo Liberation Army, which was on the US terrorism list until right before the NATO's intervention against Serbia. Neither the Serbs nor Albanians can claim that they were fighting for true justice. But what is unjust is letting Kosovo declare independence. By recognizing Kosovo's independence, we are sending a message that we are approving the act of violent secessionism. We should not tolerate acts of violence and we should definitely not treat it as a way of resolving issues. By approving such acts, we are setting a dangerous precedent for other regions populated with ethnic minorities around the world and causing instability in those regions. Therefore, the territorial integrity and sovereignty of Serbia need to be respected.

Furthermore, Kosovo was a historically-significant part of Serbia. It was the heart of Serbia during medieval times and still holds religious and cultural significance to Serbs. Many art and architecture monuments such as century-old Serb Orthodox churches, monasteries and holy sites reside in Kosovo. While supporters Kosovo independence supporters have claimed that those structures will be preserved, the reality is that many of those points of interest are currently being demolished.

The truth is the reason the US and its allies support Kosovo is because the Albanians are willing to give then what they want, while the Serbs are not. The US basically wants Kosovo's independence for the purpose of building a military base there like in Okinawa, while the Serbs would not give them that, probably because their buddy their buddy Russia wouldn't like that idea. This is the reason why the US completely ignores the terrorism that the Albanians have committed in the past against the Serbs, but rather built up a big case against in order to attack them. Therefore, Canada should stay from this unethical business deal. It's not that we don't benefit from this deal, but because it's clearly unethical.

Canada should not support the independence of Kosovo. And you should never support unethical business deals.

E5 to Feature Student Design Centre, Large Computer Lab, WEEF Office



An artist's rendition of Engineering V as seen from the Davis Centre. The building is planned to open in January of 2010.

BUILDING OCCUPANCY
Continued from Page 1

Engineering V

E5 will have a very open design, and its exterior will be unlike any other building currently on the UW campus. It will be encased completely in glass, and will have two green roofs. The stormwater drain just west of the site will be turned into a stormwater retention pond, which together with all of the trees in the area will be the makings of a beautiful quad. "It creates a community area between the Davis Centre and E5," Venter said. There will also be a courtyard with benches and large trees on the south side of the building. "One would like to see students working out there in the summer. It could be a great meeting place for students."

E5 will be linked to the main campus by a third floor link going from its south side to the west side of Engineering III (E3). Because E3 does not have a third floor, a glass tower will be built on its east end where the student team garages are currently located, which will contain an elevator and stairs to get from the ground floor up to the link. "This helps us twofold, because it now gives E3 a presence and a front door onto Ring Road," said Gooding, emphasizing how the tower link will enhance E3's identity in addition to creating a link to the new building.

The main entrance to the building will be on the west side on the second floor, with stairs going up from Ring Road. The elevators and staircases will be located in the centre of the building. The first floor and most of the second floor contain the Student Design Centre, a world-class facility that the Faculty hopes will spawn even more innovation from its students. There will be a large student machine shop on the first floor, to be called the WEEF Student Machine Shop, named after the Waterloo Engineering Endowment Foundation. WEEF recently made the decision to donate $1 million towards the SDC, which was matched by the Faculty and doubled by the University, effectively turning their gift into a $4 million investment in the building.

The first floor will also have numerous work bays with roll-up glass doors surrounding a large common work area, as well as a sanding room, a spray shop, a wash bay, a dynamometer, and three engine cells. The student teams with vehicles will be able to drive their vehicles up to the entryway at the south courtyard and then push them into the building through a passageway that goes all the way across the first floor. These work bays will be assigned to certain student teams, but there will be a process and accountability protocol to ensure that the space is being used well. The Faculty will be liaising with the teams regularly to ensure that space is allocated to the student teams that require it the most.

On the second floor directly above the WEEF Student Machine Shop is a large computer lab which will be able to seat 70 students, making it the largest lab within the Faculty of Engineering. "We are really in need of more computer commons," said Gooding, who successfully lobbied for the lab to become a reality. Beside the lab is an office that will belong to WEEF, as Dean of Engineering Dr. Adel Sedra officially made the announcement to the Foundation's Board of Directors last Thursday. "They have been very positive about supporting this building, and we decided to create this space that they could use," Venter said. The decision for WEEF to support E5 is only natural given its tendency to fund student projects and the building's heavy focus on student teams. Both the Funding Council and the Board of Directors fully endorsed the idea of making this large capital investment.

The second floor contains even more space for student teams, including additional work bays, design offices, and meeting rooms. It also has a large area open to below that directly overlooks the common work area and work bays on the first floor, by virtue of the building's open design. "You would've lost that character if you closed it off and stuck more office space there," noted Venter.

Students were heavily consulted on the design of the SDC. Professor Duane Cronin set up a committee starting in the Fall of 2006 with representatives from the several student teams. As the demand for team space had increased with the founding of new student teams and lack of space for the existing student teams, the committee was tasked to inquire as to how much space their current activities required based on current needs. Their estimate came back at 1,600 nasms, and the committee then made the specifications for what such a space could look like, focusing on maximizing common space, collaboration, and the flexibility to adapt. The spec sheets made by the student teams were supplied to the architects, who designed to them while actively working with Professor Cronin to get feedback from the students. "It truly has been a design driven by the intended users of the space," remarked Matt Stevens of the Alternative Fuels Team.

There will be a state-of-the-art two-storey research facility on the north end of E5, featuring an RF anechoic chamber. This facility will be used for leading-edge electromagnetic research by Electrical and Computer Engineering. The anechoic chamber will have a green roof.

The third floor of the building will be the new home of the Department of Mechanical and Mechatronics Engineering (MME). "What we wanted to do was have our department identity in one location," stated Professor Jan Huissoon, Deputy Chair of the Department, who was in charge of designing the floor plan. The undergraduate office, graduate studies office, and the Chair and other administrators' offices will all also be on the floor. There will be a faculty lounge in the administrative space that overlooks the green roof of the anechoic chamber, as well as two large common areas in the centre of the floor.

The link from E5 to E3 is connected to this floor. The Department's robotics, fluids, and other heavy labs are staying in E3, so the link existing is all the more important. The Department also chose to have two large seminar rooms that can hold up to 112 students each, with a fold-up partition and acoustic border in between. The rooms contain movable desks, and there are four outlets and Ethernet jacks for every pair of desks. The third floor has an astounding 800 Ethernet jacks in total. The Department is also planning to have a display case on the floor, with the trophies that some of the student teams have won.

"Getting this space is really important for the Department," expressed Huissoon. "It's our identity. And this is really going to make a big difference to the way we're perceived."

While MME will be using its space in E5 to establish a new identity, the fourth and fifth floors acquired by the Department of Electrical and Computer Engineering (ECE) will be used to relieve the Department's research space shortage. ECE made a decision 14 months ago to use the space to handle the 20 new faculty members it expects to hire by 2010, while keeping its administrative offices in the EIT building. The Department's two identical floors thus contain predominantly offices, each of which would be able to hold four grad students, though they also each contain two smaller seminar rooms with breakaway partitions. There is also a notch at the centre of the west side of the ECE floors, where a rooftop garden is located directly above the main entrance to the building.

"The research space was designed to be flexible enough to handle the research space needs of 20 faculty members, who we have not even started recruiting, doing research that we are not sure of and will clearly change over the 50- to 100-year life of the building," said Professor Jim Barby, who had the task of designing ECE's space in the new building. "ECE is taking a 50-plus year view of the space for 20 new faculty members, to keep the renovation costs low over the life of the building."

The Department of Systems Design Engineering will finally be acquiring new space and vacating Engineering II (E2) and some space in Carl Pollock Hall (CPH) once E5 opens. The floor is unlike the MME or ECE floors. It contains three seminar rooms, several student workshops and studios, an undergraduate computer lab, common rooms, as well as administrative offices on the south end of the floor, meaning all of their administration as well as their undergraduate space will be moving to E5. While the sixth floor was originally thought to have been necessary as a staging area for the building, with Systems eventually moving in, the plan has been developed sufficiently that the Department can move in at the same time as all of the other occupants of the building.

Throughout the upper four floors, along the building's glass walls, wherever possible, there will be shelves running across with chairs so that students are able to sit down and look out the window while working on their laptops. This will be done in corridors as well as common areas. "I think the students will have a great time in this building," Venter underscored.

Engineering VI

E6, which is the second phase of the expansion plan, was originally planned to be located in the vicinity of the Graduate House green and linked to DWE. However, this plan ran into complications. The planning firm that came up with the University's campus master plan in 1992, Urban Strategies, was asked to evaluate the site and provide a recommendation as to the type of building that could be constructed on the site. Urban Strategies defined an approximate footprint that would maintain the full integrity of this valued location on campus and also recommended that any building there should not be too high.

With these reasonable constraints, the magnitude of the immediate space that could be constructed was marginally less than what had been anticipated, and the site complexity and construction of interfaces with Rod Coutts Hall (RCH) and DWE would increase the cost and take considerable time to plan. So while the Faculty remains very interested in the site due to its central location, the additional classrooms, and the prospect of also relocating the Dean's Office and Faculty headquarters there, ultimately, it was left to find another solution for the second phase of the plan, which is integral to Chemical Engineering and has the possibility of an earlier implementation date.

The Department's current space in DWE, especially in the C-Wing (the part nearest to CPH), is in bad shape, with problems such as leakages and HVAC deficiencies. The Faculty has always planned to renovate this wing of DWE, but this can only happen once Chemical Engineering has vacated the space or is temporarily relocated to allow for the renovation, which is a costly undertaking in itself with a serious loss in research productivity. Further complicating the issues is the fact that the Department, as a result of its proactive international programs, is expected to expand at a larger rate than the original estimate within the Venter space study of 2006 – and to build a building now that would address their entire needs would push the costs of the expansion beyond $150 million. So the considered solution that the Faculty is currently entertaining to deal with the problem is the erection of another six-storey building, Engineering VI, on Parking Lot B, which would be similar in size to E5, but leaving some of the space "shelled in" – that is, structurally built so that it appears completed externally, but selected interior floors being outfitted at a later date as funds become available to do so.

"The idea would be if we can construct this building, all six floors comprising a total of 8,000 nasms, and 75% is outfitted at completion, that would be sufficient to accommodate the beginnings of the ChemEng relocation. They presently occupy 6,000 nasms within DWE," Venter explained. "And the extra 2000 nasms that we might not be able to finish as a result of funding shortfalls, would be shelled in, providing the structure for expansion. As funding is received, the shelled-in space would be completed and made available to ChemEng."

Furthermore, with the growing international programs, the space needs for the Department are projected to increase even further and could grow to some 10,400 nasms, meaning even more space would be needed. The solution for this is to allow for a subsequent addition to E6 at a later date with planned interfaces, allowing for easy integration as is being planned with E5 and E7. "So it's three stages for this building," Gooding noted. "The first is to have two floors shelled in. Then the two that are shelled become a reality – that's stage two. And in the final stage it's this piece on the end to finally reach that long-range goal of the Department."

See PRIORITIES on Page 13

Women In Engineering: Heavy Industry Talk

How to Lead, Succeed, and Deal with Being in a World of Men

JACLYN SHARPE
3B MECHANICAL

On Thursday March 20th, Women in Engineering (WIE) held a public lecture in RCH on the theme of women in heavy industry. Mary Wells and Susan Tighe, both associate professors in the Mechanical and Mechatronics Engineering and Civil Engineering departments respectively started by giving presentations of their experiences working in heavy industry and advice that they would give to other women working in such an environment. After these presentations the floor was opened for questions and discussion.

The attendance at this talk was very good, given the limited scope of the topic. The audience was mostly female with only a handful of guys turning out. This was obviously an unusual sight in engineering as people in the hallway kept doing double takes as they walked past. Representatives from PDEng, Coop, and the First Year Engineering Office were also there taking notes.

Heavy industry is an unusual case because the percentage of women hasn't reached critical mass, so you encounter situations that you don't run into elsewhere. Wells presented statistics showing that the percentage of women working in heavy industry can range between 1.5 up to 8.8%.

Mary Wells gave the first presentation on tips for success working in heavy industry. She began by describing the environment that one generally encounters in heavy industry. Generally as the jobs get dirtier and/or more dangerous the number of women decreases. The workers in these types of jobs are commonly not highly educated but have very high levels of experiential knowledge. In these environments there is generally a "Macho" culture; joking around, and using nicknames rather than calling people by their actual names is the norm.

Wells gave the participants a list of strategies for success in this kind of environment. First of all, one needs to get to know the operators, as their cooperation is necessary for you to do your job and they can offer years of experience with the equipment being used. She also says that one should not try to changes things overnight; establishing a relationship first is critical. Wells also stressed that it is important to pick your battles. If you continually make a big fuss and complain, it isn't going to give people a very good impression.

When picking which battles you want to fight, taking the intentions of the operators into account is recommended. For instance men wanting to help carry things for you isn't necessarily a sign that they think you're inferior, they may simply have been raised that it is polite to help a woman with heavy objects. Fighting these kinds of behaviours can build barriers between you and your coworkers which will make your life much harder in the long run.

Maintaining confidence is important for women in heavy industry. Wells recalls a situation where two engineers were running trials that went poorly. The female engineer reported to her boss that the trial had run into problems because she did not do a good enough job of explaining to the operators what she wanted. The male engineer, though he had a similar experience, reported that he explained everything but the operators didn't follow his instructions. Both engineers had the same experience, but the female engineer took the blame herself.

The second speaker was Susan Tighe who shared some of her experience being a woman in civil engineering and moved on to give advice for being an effective leader.

Tighe started off telling us about how she started out in chemical engineering because her uncle was a civil engineer, but felt that she shouldn't go into civil engineering because it's dirty. Over the course of her career Tighe realized, however, that she actually wanted to be a civil engineer because she loves working in the field.

When you get into a position when you're a minority (in Tighe's case, she was an engineer among construction workers and a woman among men) people will project prejudices onto you, and it's important to realize that these have nothing to do with you personally and everything to do with what you represent. By remaining true to yourself and building relationships with your coworkers they will adjust their perception to see you and not what you represent.

Part of building strong relationships with your team is remaining professional and never being arrogant. Tighe believes that if no job is beneath you, you will gain a lot of respect from your team, and this builds your authority. As well, you will gain a lot of valuable and diverse experience that your colleagues will miss out on. Tighe also encouraged the audience to be open to feedback and try to always improve based on past experience.

After the lectures the floor was opened for discussion and there was no shortage of comments. The discussion had to be cut short to allow everyone to get to class.

One of the participants brought up the issue of what to do about "the creepy guy" and it was clear that everyone knew what she was talking about. Advice was contributed by the speakers and the audience alike. One immediate course of action is to make sure that you always have someone else with you when you have to deal with that person. Then seek advice from a mentor, either a friend or someone else you can confide in, about what other steps to take. The consensus was that this type of behaviour should not be tolerated. If it feels wrong it probably is, so don't double guess yourself out of doing something about it. Some participants related stories about cases where human resources was alerted and it turned out that other women had made similar complaints about the same person.

When the situation is not as significant, however, don't always expect the worst. Sometimes miscommunications can occur and it's not a good idea to blow things out of proportion. One example that was given was of nicknames in the workplace. In some workplace cultures it is the norm for everyone to be called by a nickname. They may be being inclusive by calling you "Dear", so don't exclude yourself out of hand. Listen to what they call each other and get a feeling for the culture before getting offended. One attendee made the point that being called "Dear" is probably better than what they call themselves.

For more information on Women In Engineering and their upcoming events, visit WIE's website at www.eng.uwaterloo.ca/wie.

THE TIN SOLDIER

TONGUES FIRMLY PLANTED IN CHEEKS

VOLUME j ISSUE ω | IN THE YEAR 2000... IN THE YEAR 2000!

Who is this classy new advice columnist?

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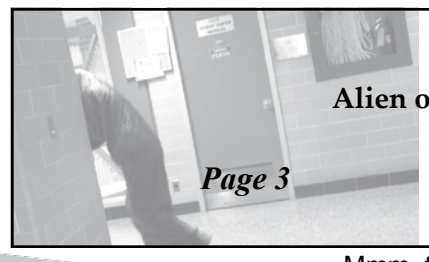
Bush Push: An Annual Tradition

Page 2



Alien on Campus?

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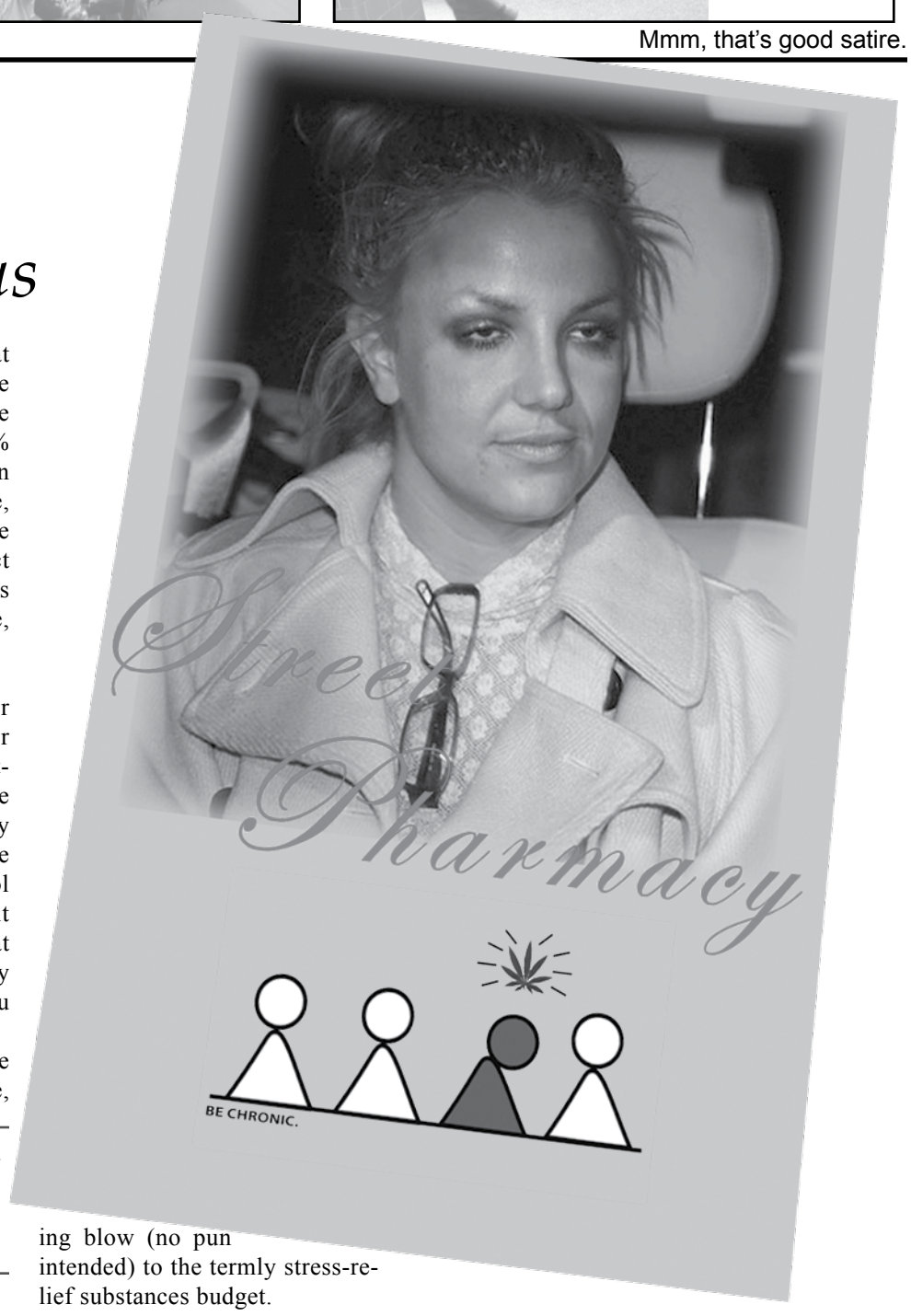
Mmm, that's good satire.

Doped

Weed scam strikes UW campus

Sunny Ng
REPORTER

Boys and girls of Engineering, well mostly boys… I hate to be the one to break this to y'all, but there appears to be something afoot in Waterloo which can only be called a "Weed Scam." Please, please, please preach if this sounds familiar: You and your friends are waiting in the Bomber lineup for well over two hours on a Wednesday evening, and all that pre-drinking you have been doing has gone to waste because you couldn't be any more sober from all this waiting business. Then, all of a sudden, you faintly hear the DJ inside Bomber spinning "The Next Episode" by Dr. Dre featuring Snoop Dogg (the explicit version, of course). Then comes the opening lines where Kurupt yells "Spread the weed out there!" followed by Snoop Dogg chanting "Blaze it up, blaze it up!" while you're helplessly (and soberly) stuck in line waiting to get into the campus pub, wishing you were having as much fun as Snoop.



Although they have been routinely shooed-off by the Bomber bouncers, we all know what power-tripping incompetent jerks they are. So I'd advise you all to keep on your toes.

Coincidentally, at the same time, you see a thug-looking guy (we're talking about a KW thug-looking guy, not a Toronto thug-looking guy; there's quite a difference) with his posse approaching you outside of the Bomber line with a smile, but still keepin' it street. What is he hiding inside his oversized jacket? Well, since we're only in the streets of Waterloo, it's probably not something dangerous. In fact, it's something you've been craving for. "Here, check this out," says the mysterious man, as he secretly passes you a joint through the fencing. You couldn't wait, so you tell your friends that you have to go to the washroom extremely badly and ask them to hold your spot in line. Once you're outside, you check if there's any campus police nearby. Nope. Snitchers? None. You light up the joint and next thing you know, you're higher than Amy Winehouse on a normal day in court. It was the best goddamn weed you have ever smoked! And you have smoked some really good stuff before!

You stumbled your way back into the Bomber line while keeping it cool. Your friends ask you what took you so long, and you took a while to come up with a response, but eventually you mentioned that you had Taco Bell for dinner and it all made sense to them. You later return to the thug-looking guy and tell him, "I want more." He tells you that he'll offer to sell you the same weed at 90% below market value. All you have to do is leave him your address so he can arrange a drop-off, and pay a 50% deposit. He seems very legit, and even has a portable debit and credit machine, so you really have no excuse. I'm sure you've all been through this same exact scenario. When all is said and done, this kind of deal sounds too good to be true, even when you're high.

Hate to say it, but that's the case.

I was first approached at the Bomber lineup on January 9, the first Bomber night of the term while anxiously waiting to get in with my crew. We were quickly convinced (not like it really took much) that smoking weed would be ideal for the upcoming stressful school term. I convinced all my homies that it would be fun if we all did it and that they shouldn't be party poopers. So, my friends and I spent $666 on… well, you guessed it, absolutely nothing.

Actually that's not totally true, three days later, on our supposed delivery date, we found a mysterious bag outside beside our driveway that looked extremely promising. We quickly snatched it into the house and opened it. It certainly did look like weed, but definitely did not smell like it. Our resident cook took a sniff and immediately knew what it was. "It's oregano!" exclaimed the delighted chef. Unfortunately, the rest of us were not so delighted about the delivery. We traced the phone number of the hustler through the credit card we used for the purchase and the number traced to a company known as "King Street Pharmacy". We gave them a call, but all they could tell us was that there were no refunds and that all they sell is oregano; that they took no part in any of this drug trafficking business that we were accusing them of, and they hung up on us.

That was back in January. Flash-forward to March, the hustlers are back, this time with a different posse disguised in different coloured-jackets. Although they have been routinely shooed-off by the Bomber bouncers, we all know what power-tripping incompetent jerks they are. So I'd advise you all to keep on your toes.

After doing some mad Googling on the triple-dub, we realized we weren't alone. This scam has become widespread, and for those of us engineers who are living off co-op paycheque to co-op paycheque, a wasted $666 can be a rather devastating blow (no pun intended) to the termly stress-relief substances budget.

Know this, my fellow scam-ees, you are not the first this has happened to, nor is it likely that you will be the last.

We decided to get to the bottom of this by investigating the unofficial campus pot-smoking club, the Waterloo chapter of Engineers With Bongs (EWB). The director was excited to talk to us about the proper avenues to get the best weed. "Duuuude… you gotta get them Fair Trade weed, man," he says. When asked about what exactly Fair Trade weed is, and where to get some, he attempts to clarify, "Fair Trade weed… ensures that farmers and uhh… traffickers get a fair share of the money you use to get your weed. How rad is that? It's the best way to buy quality weed… guilt-free. Share the love… dude. You can get Fair Trade weed from most local weed men. Like uhhh… dude, I just lost my train of thought." He then proceeded to recite the verses of Sean Paul's "We Be Burnin' (Legalize It)" to preach the benefits of marijuana.

EWB has been very active in advocating Fair Trade weed. Just recently, they held "Chronicly Responsible Day", a day that asks students to pledge buying only Fair Trade weed. The day was renamed to a certain colour that does not rhyme with anything and is not purple, in order to disguise itself on campus, so that the administration wouldn't go bananas on them. When asked about why they chose that certain colour and not green, the director responded, "Green implies money and we're totally not about that. We're all about spreading the love man… Oh geez, I don't know why we chose that particular colour. Stop asking me questions, man, you're tripping me out!"

We later found out that it is safe for students to buy Fair Trade weed from street pharmacists that participate in the program if they are fully certified and have a special sticker on their duffel bag. But if someone attempts to sell you something, and there is no sticker on their duffel bag, follow this reporter's advice, which has been earned (regrettably) first hand: Don't buy it, and report them to SLC Management and campus police.

Clarification

In relation to the cover story "Doped," in this issue of *The Tin Soldier***, King Street Pharmacy has confirmed that it's running a completely legitimate business. Furthermore, they are now working through THUG-EFX to provide exchange certificates to students whose "packages" did not arrive. Students who purchased "packages" from THUG-EFX representatives on campus are encouraged to contact their respective dealerships to confirm which ones haven't been busted by the fuzz.** *The Tin Soldier* **apologizes for any confusion.**

HighRoller: Rollin' High

HIGHROLLER
SENIOR ADVICE COLUMNIST

Dear HighRoller,

Are you serious?

- Unenthused Sceptic

Dear Mr. Sceptic,

Not really.

-HR

Yo HighRoller,

What's your deal?

- Hip to the Noise

Sir Noisehip,

I'm simply offering a higher-end alternative to the Iron Warrior's regular write-in advice column. What does that mean to you the reader? Fewer spelling mistakes, dripping sarcasm with an edge, and most importantly, my promise to never be photographed wearing a bandana.

-HR

Dear "The" HighRoller,

My girlfriend and I disagree about why engineering is such a sausage fest. She says it's the result of historical trends and institutional discrimination. I think that girls are just bad at engineering; proficiency in math and science probably comes with the Y-chromosome. Wikipedia was no help. Can you help settle this bet?

-Hoping to Win

Sorry champ, you missed the boat on this one. Ask yourself, do I enjoy spending every day with immature frat boys? What exactly makes you think that there's a line-up of women ready to subject themselves to five years of this misery? So no, the Y-chromosome has no bearing on low female enrollment. It does, however, explain why women are such terrible drivers.

- HR

Dear Chauvinistic Asshat,

How can you claim that girls are genetically bad at driving? That's outrageous misogynistic nonsense!

- Unimpressed

Oh come on. You know it's true.

- HR

Dear HighRoller,

My boyfriend thought I was flirting with his best friend. They had a fist fight and then went for pints and chicken wings. What is up with this uncivilized behaviour?

- Flirtatious and Confused

Dear Flirtatious,

Guys conduct interpersonal relationships differently. Conflicts are settled in a primitive yet effective manner. Then the friendship moves on according to the laws of nature which state that beer and chicken wings are delicious. Girls rarely fight. That's why a catfight is so hot. Girls prefer to snipe at each other, talking smack to mutual friends. This psychological warfare usually results in an eating disorder. Guys need wet naps and ice packs to clean up after a fight. Girls need therapy for between 6 months and 8 years. I ask you, which is more civilized?

- HR

Hey HighRoller,

Long time reader, first time writer here. Do you think the other guy actually receives any questions to the email address he provides? Most of the questions seemed contrived and his answers still aren't exactly pithy…

- President of the HighRoller for President Group

Glad you decided to write in – I believe this may be the first time we at the Iron Warrior have had the honour of receiving mail from a President.

I agree that the answers aren't pithy – they're more pitiable than anything. No, I don't believe my compatriot receives actual mail anymore, at least nothing beyond the endless spammed promises of enlarged sexual organs and offers of completed theses. Much like you, my obviously fictional friend, I believe that those uniquely disappointing and obviously manufactured questions are the writer's own creation.

In the author's defence, a large proportion of engineering students are enrolled in departments other than Mechanical Engineering and cannot thusly be expected to possess such unnecessary skills as literacy.

Keep in touch,

- HR

Listen you,

I'm not sure who you think you are or what you think you're doing, but you're not funny. Low-Rider is a beloved contributor to the Iron Warrior and is firmly entrenched in Systems Design lore. Hating on the Low-Rider is like hating on all of us. Bigot.

-Enraged and Not Amused

Back the truck up. Who said anything about hating on the author you mentioned? As I previously explained, I'm merely offering an alternative service to readers* of the Iron Warrior. (*"readers" is meant to include those who receive the content of the paper through oral dictation or through pictographic representation like students enrolled in Geological Engineering) Furthermore, no one in this paper would ever devalue the innumerable skills and valuable contributions that Systems Design Engineers bring to Waterloo and our society at large. I, for one, am wholly unqualified to pick out the appropriate shade of turquoise for a kitchen to achieve a harmonious balance between productivity and spiritual fulfilment. And who among us, if not System Design Engineers, would be able to adequately feign knowledge for overall processes without any knowledge whatsoever on the system's individual elements? That, my good man, is a job left to the professionals. So let's have no more talk of hate.

Sincerest Regards,

- HR

All questions, comments, complaints, legal notices, and love letters can be sent to UWHighRoller@gmail.com. Seriously – there's an address.

Bush Push for Scattered Shrubberies a Success

STUART PEARSON
HORTICULTURE EXPERT

During its fifty years of existence, the Engineering Society at the University of Waterloo has accumulated a number of rich traditions, from the Ridgid Tool to the Iron Warrior. Perhaps the most compelling of these practices, however, is the Bush Push. Now in its 32nd year, the event is a fundraiser to support notable causes in the community and around the world. This year, money raised by participating engineers went towards Scattered Shrubbery Around Campus, a Waterloo-based non-profit organization that aims to provide unkempt vegetation with a decent home and the occasional trim.

Students arrived bright and early on the morning of March 15th, taking advantage of the free coffee before the main event. "I'm pretty excited about it," said first-year student Winston Thatcher, "I've never dragged a shrubbery around before. I wonder if it'll be heavy…" Students lined up in front of the large green specimen in two parallel rows and grabbed the ropes, twitching with anticipation at the task that lay ahead. Contrary to its name, the Bush Push actually involves *pulling* the plant, seeing as it's somewhat difficult to push on a rope.

Bedecked in matching t-shirts and scarves, the engineers tugged began to tug and the bush was moving. A police escort ensured that the students could make their epic journey to downtown Kitchener without running afoul of traffic. Passing vehicles honked their horns in salute, and passers-by whipped out their cell phone cameras to take snapshots of the bizarre proceedings.

The toughest segment of all seemed to be the approach to Uptown Waterloo near Wilfred Laurier University. The trek uphill seemed to take an eternity, and once the hill was crested, the engineers had to run in order to keep ahead of the rolling topiary. "You'd be surprised at how much momentum a shrubbery this size accumulates," panted Adam Douglas, 3A Mechanical, "You have to jog to keep ahead of it."

The engineers all seemed to agree that Scattered Shrubbery Around Campus was a worthwhile cause to support. "It really is a shame when you look around the campus and see so many trees and other plants growing wild and scraggly," noted 4B Environmental Albert Gorey, "Some quick work with the garden shears can do wonders to clean them up."

The group arrived in downtown Kitchener little over an hour after they began, recording the fastest time in Bush Push history. Rousing renditions of the Hymn and other odes to vegetation helped the group finish the home stretch. One bemused resident of Kitchener commented, "It's certainly not every day that you see a topiary being pulled along King Street. I'm glad to hear that young people are so interested in raising awareness for the plight faced by our local plantlife. It's great to see that kind of dignity and dedication."

Scientology Declares War On Anonymous(es)

ANONYMOUS

In a long-predicted move, the Church of Scientology has declared the beginning of a legal war on the group known as Anonymous. According to a recent press release, the Church is "prepared to go to the ends of the earth" in its pursuit of justice.

However, in a rare and exclusive interview with the Tin Soldier, a senior church spokesperson admitted that the fight is proving difficult.

"We didn't realize just how insidious and pervasive this organization is," stated Tim Foder, media relations staff member and OT6. "We've found that this goes all the way to the top – and the bottom."

The Church began by exploring the well-known internet hiding places of the Anonymous elite. From there, they branched out to less-connected but equally nerdy websites, such as reddit.com, digg.com, and slashdot.org.

"We struck gold at slashdot, where we found that the organization has been posting multiple times daily under the name Anonymous Coward. We are currently working with Slashdot to obtain the IP addresses used by the group. We also learned not to underestimate this organization, which has consistently earned scores of '4: funny' and '5: insightful'."

The Church has discovered the length of Anonymous' reach in the "real" world as well, where the organization has penned numerous erotic novels and angry letters to the editors of small-town newspapers regarding obscure zoning by-laws.

"Our investigators discovered that Anonymous has made contributions to many museums, libraries and art galleries across the world. After issuing subpoenas to these institutions, we were surprised to learn that many Anonymous members are wealthy, elderly couples."

Prof. John Brubaker, a senior art historian in UW's English Literature department, condemned the Church's actions. "Many of the greatest works of art known to man are attributed to Anonymous," he noted. "Without them, we would be unable to perceive the rich tapestry of history."

Roder responded by stating that "95% of bathroom stall graffiti worldwide is also attributed to Anonymous. These people aren't exactly geniuses."

Apart from tracking down so-called Anonymous Persons, or APs, the Church has also turned its attention to Non-Anonymous Persons Supporting Anonymous Persons, or NAPSAPs. Some suggest that the Church may be spreading itself too thin, and may not have enough lawyers to contend with all NAPSAPs and APs at the same time. Several legal experts have voiced the opinion that the Church would do better to focus on APs and PAPs (Probable Anonymous Persons), and leave NAPSAPs for a later time. Others contend that APs, PAPs, and NAPSAPs are all critical to the Church's success.

However, most experts agree that the Church's campaign may end prematurely if it happens to encounter an Awfully Well-Connected and Rich Anonymous Person, or AWCRAP.

Global Warming Conspiracy Exposed

Al Gore Gets Rich, Hybrid Owners Get Screwed

RORY ARNOLD
SENIOR HIPPIE
CORRESPONDENT

High gas prices, hybrid cars, and the threat of global warming may no longer be headlines. Not after the unraveling of what some have said to be the greatest conspiracy since the moon landing. Through some serious undercover investigative journalism where I completed acts I am not proud of, I began to unravel a world of deceit including everyone from alternative energy companies to ex-politicians and from oil corporations to automobile manufactures.

I was able to speak with Loud Dutchman, an engineer for Heatwave Industries, which is a worldwide leader in alternative energy technology and he claimed that global warming was in-fact non-existent, but rather a conspiracy cooked up by alternative energy companies in order to sell their products.

Early in 1997 Heatwave Industries was on the brink of bankruptcy when they hired a group of scientists to manipulate data and using their scientific authority to speak out against fossil fuels and claim a need for alternative energy sources. With the sudden outcry against oil companies, their CEOs such as Wealthy Richardson of Bigandevil Oil and Gas Company effectively brought the myth that oil is non-renewable into public knowledge. "We really got them," Richardson laughed. "Oil comes from fossils, so as long as things keep dying, fossils keep getting made and we keep getting oil.

This, combined with effectively getting the United States to invade the Middle East allowed them to raise prices to make up for their lost revenue caused by people buying windmills and solar panels.

The alternative energy companies then enlisted former Vice-President Al Gore to produce a movie about how bad oil was. With the help of paid off scientists, Gore convinced the American public that global warming was here and was going to destroy us. "As a democrat, I'm really against rich, hardworking people. But I'm all for people who make money just for jumping on a bandwagon," Gore explained.

Even Toyota was in on the conspiracy. "I can't believe anyone actually bought this crap," the CEO of Toyota said referring to the Toyota Echo. "Of course we knew about the conspiracy, but we weren't going to say anything and let Americans go back to buying real cars."

Heatwave Industries, Bigandevil Oil and Gas and Toyota all face conspiracy charges in front of the United States Supreme court, but more importantly they have to answer to every consumer who over paid on something useless like a hybrid car or solar powered sex toy, all because of this conspiracy. Of course, now I'm a little disappointed. It's bloody cold in this country and I was depending on global warming to fix that.

Caffeine-Dependent Alien Discovered on Campus

The E-Files

ALEX GIROUX
JUNIOR
EXTRATERRESTRIAL
CORRESPONDENT

My dear readers, I come to you with a sensational tale of danger, intrigue and science fiction. For years, the debate has raged on about the existence of aliens, but I come to you with concrete proof, in the form of a series of blurry photos taken late one night in an engineering building right here on campus. I repeat, proof of alien life forms exists, and I am about to share it with you. Yes, you. And you.

It all began one dark night while I was on campus late while working on a lab report. Eventually my need for coffee became too great and I ventured out of the computer lab into the dimmed corridors in the direction of the SLC and the Turnkey desk. On a whim I took my camera with me, since one never knows what strange and wonderful things one may find on a late-night jaunt through campus.

Returning through Engineering 3, I paused in my travels to use the, ahem, facilities. Suddenly, a large blob leapt out of the shadows at me! Terrified, I ran into the men's washroom, but the thing did not follow me. I listened to the pitter patter of an unknown number of feet disappearing down the hallway as I contemplated what to do next. Looking at the camera in my hand I leapt into action, sneaking bravely out of the men's washroom to follow the shapeless blob rapidly vanishing down the hallway.

But fear not! Dear readers, I was not about to let a story run away from me that easily, especially if that story involved what appeared to be an extra terrestrial being, right here in Waterloo. I followed the footsteps, spotting the creature as it was negotiating the stairs to the second floor of Engineering 2. I pursued it, snapping pictures as I went.

The alien continued its journey through the hallways, with yours truly in pursuit. Demonstrating a peculiar dexterity it entered the Pulley lab, where it attempted to use one of the computers. The other denizens of the computer lab that dark night seemed oblivious to the scientific discovery sitting in their midst. I took pictures through the window in the door, but suddenly it spotted me.

I tried to run, but the thing was too damn quick. It knocked me to the floor, drank my coffee and vanished back into Pulley. Picking myself up off the floor I returned to Turnkey to replace my stolen coffee.

On the way back from Turnkey for the second time that night, I decided to go by Pulley in the hopes of seeing the creature again. Peering through the frost-covered glass in the window, I spied the creature in the corner, hunched over a keyboard, surrounded by papers and textbooks. No alien life here – just a poor sleep deprived soul who had taken to wearing a sleeping bag to fend off the cold of the lab.

Or WAS it?...

Letter to the Editor

Stop Admitting Geese to UW!

I value diversity as much as the next guy. Seriously, it's what makes this university great. Still, I can't help but notice that one group of students doesn't seem to be making a positive contribution to university life. They blatantly disregard our beliefs, values and standards, they disrespect us on a daily basis, and they never even try to integrate with the rest of the student population.

I'm speaking, of course, about geese.

Now, don't get me wrong. I'm no speciecist. But based on my time here at Waterloo, I can only come to the conclusion that the geese are, well, different.

For instance, there's the whole language thing. In my entire career here at Waterloo, I have never been able to have an intelligent conversation with a goose. Time and time again, they just stand there, braying mockingly at my attempts at friendly interaction. Now, I understand that it's easier to speak your own language when you're around other geese. But shouldn't you at least be capable of conversing with human beings?

Which brings me to my second point: when was the last time you saw a goose who wasn't hanging around with 18 other goose friends? These little cliques really get on my nerves. Just once, I'd like to see a goose walking along with a human UW student, complaining loudly about last night's hockey scores. Or maybe participating in EngSoc and other student organizations.

Then there's the issue of their, well, cultural norms. I respect and value all of the different lifestyles we're exposed to in a multicultural society, but honestly, shitting all over campus is not cool. That kind of thing might fly down in Florida, but not here.

Sometimes I even question why the geese come to Waterloo. Sure, they tell us that the days of the MRS degree are over; but has anybody else noticed that they pretty much just come here to hook up? It always happens the same way: they're single at the start of the term, then suddenly they're all paired off. Before you know it, she's knocked up and got 8 in the oven.

That's when the worst of it comes. Now, whenever you walk too close, they get all overprotective and hiss at you (all in the name of "gosling security"). Seriously lady, I don't want your friggin' baby! Oh, and haven't you ever heard of "birth control" before?

Listen, I recognize how hard these geese have fought to get into this country. I've seen some of those migration patterns, and honestly, I don't think I could do it. But isn't there a place they could go to be around people they'd be more comfortable with? People who share their interests and intellectual pursuits?

Maybe Western?

- Dane Corneil
3B Systems Design

Letter to the Letter

It's true that Geese seem useless at first glance, but so did pools of cornstarch, but then we realized that it was a non-Newtonian fluid that reacted in an exponentially-proportional manner to the amount of force applied! You see, Waterloo Engineers are known for their innovative-powers; our faculty literally leaks innovation-radiation, which is then absorbed by our brains to expand our nerdy horizons past any imaginable to mankind (at the cost of social-skills). My own horribly mutated brain has already churned out hundreds of excellent uses in mere minutes. That being said, many of them are patentable, so I'll only list the mediocre ones.

Extreme Goose-herding

Many 'hearding events have been invented in the past; sheep herding, chicken cooping, etc, but none compare to this. Teams attempt to heard geese into their respective team-circles, and try to keep them there until the time-limit. Tensions will run high as teams try to sabotage one another, and geese snap at everything that moves. For greater difficulty, try incorporating goslings into the event.

Goose-dressup

More of a frosh-week idea than anything, teams are assigned one goose each, and are told to go wild. It can be pretty hard to judge impartially, though; I myself am rather fond of a goose in a tux. It reminds me of a penguin.

Squirrel-toss

I know what you're thinking: "what does a good, ol' fashioned squirrel-toss have to do with geese". It's true that the event can be preformed without geese, but they can enhance the tossing-experience quite a bit, much like MSG can enhance any Chinese dish. The event will follow all the standard rules of the squirrel toss (trick-landings, acorn bonus, etc.), but you must also try to land the squirrel as close as possible to a goose *without* the squirrel getting attacked.

- David Morris
2A Geese Studies

Counterpoint

Are Afro-centric Schools the Correct Decision?

Counterpoint

KENNY
PRESIDENT, CAMPUS CRUSADE FOR CURLS

We afros have had a long and rich history, which has created an incredible sense of together-ness for curls of all kinds, and there are many perks for being an afo; for example, many afros are low-maintenance, only requiring a wash a day to keep fluffy. We look good no matter which season, and can bounce rather stylishly (only the mullet can compare in this regard, but they tend to fall over after a couple hops). It's also extremely easy to store pens, pencils and rulers in our luxurious curls.

So, if life is so easy for an afro, why should we get a school all for ourselves? First off, all of these traits have lead to much jealousy and discrimination over time. The straighter hairstyles can sometimes to try rat-tail us while we're not looking, and the really short guys tangle themselves up in us, and it takes days to get them out. Someone once even tried to braid me, which was a traumatizing experience which I'm still seeing a physiatrist about (it may seem like fun and games at the time, but the knots last for a lifetime).

And being an afro has its disadvantages as well; we often go limp when wet, and can't stiffen up until a good few hours after (leading to many awkward moments when someone tries to "spring-a-curl", but the thing just flops back down), and if we're held down for too long, it might stay down for the rest of the day! I myself have been confused for being an emo-styled hair (on a really bad day). And, although some might disagree, I've experienced this first-hand and it seems to be a sad-truth in the afro-community: drugs. Many afros, along with the dreadlocks (a rather seedy bunch, if I say so myself), "experiment" with under-the-table shampoos designed to "enrich" their hair-y experiences, and can never get off them. It takes a very strong lock indeed to resist the pressures of trying out the latest and greatest "vitamin" designed to "strengthen their 'twangs'".

The school is planned to contain a 'pick station, in the case that a fro loses one during his day, emergency-fluffing booths throughout to ensure that every fro has a spring in its step, and a full-staff of stylists for counselling purposes, and to help a fro in trouble to get back onto the formula right for their life.

DAVID MORRIS
ANTI-AFRO LOBBYIST

Creating a school only for afros is a slippery-slope towards hairstyle-discrimination for the TDSB. Being a human being, and a bald one at that, I feel that this is completely unnecessary, to the point of idiocy. It's not like my hair is able to think, let alone require a high school education.

Who needs hair, anyways? It's completely overrated. We like hair because it "looks nice". Yeah, great reason; reality is how you believe it to be in your head, and if we really wanted, we could all believe that a lack of hair is the best damn looking hairstyle ever to come out of mother-nature's womb. Speaking of wombs, aren't babies are born bald as well? Why do you think *that* is, eh? Some say that we're closest to God when we're first born, so maybe he actually *wanted* us to be bald. Or, if you're a hippy-liberal-pinko-naturalist, maybe it was Nature's will to have all of mankind bald, but a stray particle-wave-thing of electromagnetic radiation screwed everything up.

I think I might be on to something here. What function does hair serve? We don't need it to protect us from the sun; we have hats for that, and there are many, many more types of hats than there are hairstyles, and, unlike hair, anyone can wear any sort of hat they wish. In fact, I'm going to turn this thing around and argue that there should be a school for those who wear hats. This would create social-pressures on all the non-hat wearers to "go with the flow", and there might be a second coming of the hat (after they left this world in the 1960's).

And it's more important now than it ever has been before for people to be wearing hats. You see, with Climate Change looming in the distance, we need to find ways to cool the Earth. Most people's have darker heads of hair, leading to increase solar-absorption, thereby heating the planet. However, if everyone were to wear large, brightly-coloured hats, that sunlight would be reflected harmlessly out of the Earth, back to the Sun from whence it came.

Word Search: Engineering Innuendos

S	S	E	N	F	F	I	T	S	V	N	G					D	K	Y	O	S	Z				
A					R	H	K	H	S	O	S						E	B	N	C						
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W	U	M	O	J	C	E	E	E	I	G	G	N	O	I	T	A	C	I	R	B	U	L	C		
T	V	I	M	T	S	C	E	C	I	F	I	R	O	P	G	K	C	O	C	E	G	U	A	G	R
T	K	N	E	S	O	K	R	C	Z	G	S	X	V	I	B	R	A	T	I	O	N	L	N	E	E
U	M	A	T	L	K	I	W	W	C	O	V	S	X	D	E	V	L	A	V	K	C	O	C	C	K
B	E	L	P	P	I	N	E	S	O	L	C	A	D	Z	H	P	J	B	S	H	U	F	J	N	H
K	M	F	P	I	R	G	M	E	Z	E	L	O	H	W	O	L	B	I	X	V	Y	N	T	Y	
N	O	I	T	A	R	T	E	N	E	P	N	W	Z	R	I	G	I	D	B	O	D	I	E	S	
N	A	U	L	H	R	N	O	I	T	A	G	N	O	L	E	X	S	D	I	U	L	F	S	C	
A	W	O	V	G	P	E	E	N	I	N	G	H	E	S	H	R	I	N	K	A	G	E	N	L	U
G	A	T	P	L	X	G	K	C	A	R	C	V	U	U	Z	Z	U	G	A	M	G	B	B	A	G	O
D	C	D	X	P	B	F	J	X	W	F	H	H	Y	X	J	G	L	O	O	T	C	V	R	G	W	M	D
I	U	M	A	C	C	E	S	S	H	O	L	E	Q	S	M	S	R	C	L	E	A	V	A	G	E	N	O	Q
			J	U	F	X	B		J	Z	M	C	Y		V	N	L	I	F		R	Z	J	A	O		
				D	D	S				L	N	S				S	F	I				B	J	U			

THE TIN SOLDIER
JUVENILE HUMOUR BUREAU

A&E CHALLENGE UPDATE

Congratulations to the Exec team for their astounding victory during the last A&E challenge for submitting the largest list of loopholes in Policy 71 in record time!

This issue's challenge is to be the first to complete this dirty engineering word search. Drop off your completed solutions outside The Tin Soldier office in CPH 1331B.

Word List

NECKING	TOOL	BLOWER
ORIFICE	SCREW	CLOSENIPPLE
CLEAVAGE	VIBRATION	GAUGECOCK
RIGIDBODIES	LOAD	PENETRATION
ELONGATION	LUBRICATION	COCKVALVE
BLOWHOLE	FLUIDS	THRUST
BUTTWELD	STIFFNESS	SHRINKAGE
CRACK	ACCESSHOLE	PEENING

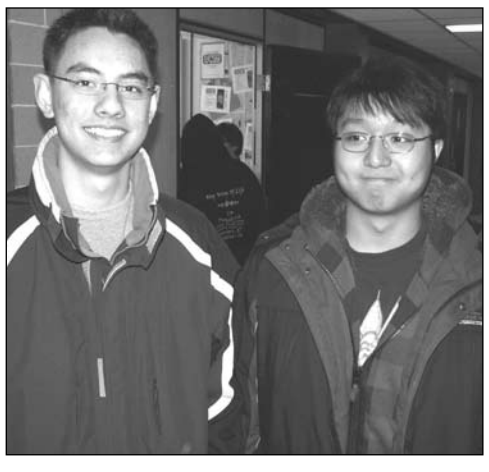
THE TIN TRIBUNAL

"How should a newspaper taste?"

David Morris, 2A Electrical

June Lowe
4B Awesome
"With its tongue."

Tyler Gale
3B Geological
"Don't ask me! Don't ask me! I've been in like four of them! Don't include that!"



Adam Yim & Steve Zuo
2A Systems
"Like chocolate ice cream."
"No - *real* ice cream: Sorbet."

Adam Schubert
3B Electrical
"Sweet from all the tears from those who were slandered by it."

Dave Halford
3A Mechanical
"Good enough to sustain the editor while he lives in the IW office."

Getting Accepted to Grad School

KEVIN CEDRONE
4B MECHANICAL

The purpose of this article is to relay my experiences and advice on applying to grad studies in engineering. This article is intended for second and third year students and on a more limited basis to fourth year students who may find it useful as a preparation checklist.

I am writing this article based on my own experience applying to mechanical engineering graduate studies. These ideas deal with Canadian and American schools. I am writing this article because other than senior colleagues from UW, I could not find a single comprehensive resource to guide me through the process. There are five major steps involved in applying for grad school. In chronological order they are :

1. Suitability
2. Experience
3. School Selection
4. Application requirements
5. Acceptance; Supervisors/Finances.

These do not progress completely linearly. I myself tended to re-visit previous steps in an 'iterative' process. I can scarcely believe I'm about to say (write) this, but *if I knew then (in first year) what I know now* I would have been more systematic about things.

1. Suitability

On the academic-industrial spectrum, graduate studies in engineering tend to be primarily academic. Engineering activities at the Masters and PhD level tend to be simulation, model building, trials and above all, research. Think prototype instead of plant commissioning. This may not sound appealing to you at present but advanced graduate degrees open (and close) certain career paths. For example, most aerodynamic engineers working in Formula One have PhDs in fluid mechanics (mechanical engineering). On the other hand, not many small companies will be willing to pay for a PhD.

At most schools you won't have to decide to do a PhD right away. You may benefit from deciding early enough to take advantage of special fast-track programs like UW's combined Master's/Bachelor's program which starts towards the end of third year.

Grad programs are competitive. Depending on the school and program, you may require anywhere between low-80s overall average (UW) to mid-90s (MIT, Stanford).

Summary: If you enjoy theoretical aspects of engineering, the thinking/discussion part of lab reports, and self-directed abstract problem solving then graduate studies are a good option for you

2. Experience

Find out what you like to work on. This will help you decide what you want to research. At UW, the best way is to take co-op jobs in various fields in different capacities. Challenge yourself with an international co-op placement, or an exchange term. Arrange an Undergraduate Research Assistantship (URA) with a prof. You will get paid to help them with their research. You will make friends with grad students and learn how to use important lab equipment and software. You may even co-publish a paper.

Summary: Knowing what you want to do, and having experience in that field will help in a major way on your applications.

3. School Selection

Now that you know what you are interested in, you can search the literature to find out what universities are leading research centres for that topic. UW professors with similar interests may be interested in accepting you, or may refer you to prominent schools in that field. Take a look at their acceptance statistics for number of students, average grades, funding expectations etc. Take a look at the city the school is in. Comparable programs might be differentiated on the basis of the campus life. End up with 3-4 schools on your list.

Summary: UW has a good reputation. Don't be afraid to set your sights high. Pick a school with a good academic reputation, and decent life outside the lab.

4. Application requirements

For most schools, the list includes:

• Application (online or paper)

• Transcripts (official, sealed, 1–3 copies)

• Letters of recommendation (2–3, academic, sometimes co-op)

• Statement of Purpose

o Why grad school? Why this school? Why you?

• Supplemental application information (program specific)

• GRE test results

I would like to elucidate letters of recommendation and GRE test results.

Letters of Recommendation

There are competing schools of thought regarding letters of recommendation. Some people assert that you should choose a professor who knows you best in terms of academic and research abilities, to give a comprehensive evaluation. Others assert that you should pick prominent individuals (well known profs, Deans, Presidents, etc.) regardless of your affiliation with them, as long as they are willing to help you out. I take a hybrid approach. I believe you should endear yourself to prominent individuals. My philosophy is that they earned their reputation and I can stand to benefit and learn from their example. So, volunteer to do research, sit on committees or otherwise make yourself known (in a positive way) to 'important' people who may then volunteer a sincere letter of recommendation with pleasure. Most people I've spoken with you should opt for academic references (for the academic program) unless the program otherwise specifies co-op or industrial reference.

GRE Results

Essentially, the GRE is the grad school equivalent of the SAT. The GRE has 3 sections. One math, one analytical writing (essay) and one verbal (vocab). It is a computer adaptive test. If you get one wrong, the next question will be easier. If you get one right, the next question will be harder. Earlier questions have more impact on your score than later ones. If you see a string of hard questions, you're probably doing well. If you see a string of easy questions it means one of two things; either you are doing poorly or you may be writing an 'experimental' test and helping to calibrate 'hard' and 'easy'. With a cost of around $180 (including up to 3 schools) this may sound tough. Relax. After 5 years of engineering the math will be easy. The analytical writing is pretty easy if you're good at arguing, or spotting holes in other peoples' arguments. The vocab section is tricky. Practice will help but this is arguably the least important section. Some schools will require an additional engineering-specific section.

Summary: Schools have complete checklists on their graduate school admissions website. Check and double-check. Start networking for solid LoRs now. Book your GREs to give yourself at least 2 months to re-write before the schools' score cut-off.

5. Acceptance; Supervisors/Finances.

Your stellar application package secured you a spot at each of your top choice schools. Congratulations! In the time that has elapsed since you applied, professors may be on sabbatical or had grants expire. Establish a dialogue regarding research positions. Look into the international student requirements (esp. financial) if you intend to go outside of Canada.

Your research/thesis supervisor will be an important person. They will make or break your grad school experience. You must get along well with them. This is a matter of meshing of personality, philosophy and work ethic.

Summary: Find the brightest star in the field who has an opening on their research team. Visit the school, tour the lab, talk to grad students of your prof and others'. Do this before you formally accept. (Many schools will help pay for this). Everyone wants the best fit of student/supervisor.

I wrote this guide based on my experience applying to MIT, Stanford and Berkeley. I have been accepted to MIT but as of press time I am still waiting to hear from Stanford and Berkeley. I am excited about continuing my engineering career at the post graduate level and hope this article helps you do the same.

Other Resources:

http://www.ir.bbn.com/~craig/things-i-wish.html

http://www.cs.indiana.edu/how.2b/how.2b.html

http://www.mathewlu.com/grad_school/grad_school.html

http://www.pitt.edu/~biohome/Dept/Frame/applytograduateschool.htm

http://www.cs.unc.edu/~azuma/hitch4.html

A Gripe With Bureaucracy

MICHELLE CROAL
2A CHEMICAL

The other day I ran into an off-stream classmate of mine that I hadn't seen or had much contact with since 1A. We chatted for a while, standing between Physics and the Grad House green in the blizzard that was this year's first day of spring, before sensibly moving to POETS. We spent the good part of an hour catching up, discussing a range of topics from professors, courses and class spirit to co-op, minors and foreign exchange.

Turns out my friend had taken a year off engineering to work on chemistry and biology courses, in the hopes of eventually building up enough to take on a minor. He commented on the way that science courses are all the buildup and background, while engineering is more of the "how can we use this?" and not much at all of the "where did this come from?" That led us to the topic of administration and bureaucracy, especially in the University of Waterloo. I don't have the first hand experience, but his is not the first story I've heard about where the University will do everything in its power to stop you from building your own degree. The courses we take as engineers don't easily tie over into other faculties, so tackling a minor means, exactly as Peter said, taking a year or more off the engineering (unless you want to attempt it concurrently with your engineering degree, which may just be more stress than it's worth). While I have no doubt that Waterloo is giving me a top quality education, my discussion leads me to wonder if what I'm getting out of my degree is not just the same as every other chemical engineering student. I'm waiting until third year to have a few technical electives, but the majority of these will only come in my final year here. For now, I'm sticking with the cookie cutter courses and thinking as one of 65 2A chemical engineering students. There's honestly not that much separating me from turning into one of many mindless workaholic engineering drones churned out at a rapid rate by the Faculty. And, if you think for a minute that those CSEs you're taking are changing that, you're wrong, because those courses are already on a list that's been designated by someone who has an idea of what a "well-rounded engineer" is. Management sciences and economics are all well and good, but those courses that will truly give you a different perspective, such as English, history, or fine arts will most definitely clash with your engineering schedule. And what about languages? Knowledge of a second (or third or fourth) language gives you significant competitive edge, and allows you to take your career outside of Canada, but at Waterloo, languages courses only count towards "requirement 4" for CSEs, i.e. they are filler.

We talked a bit about other issues concerning Waterloo students, like co-op, and how we work so hard in high school to get into Waterloo for this opportunity. And then we meet Jobmine… It's interesting how a student coming to CECS at the beginning of term with a job he found on his own interest and initiative will face quite a few more hurdles and paperwork filling than if the same said student, with the same said job, comes to CECS at the end of term, after half-heartedly applying on Jobmine (so I'm told).

One would think that the paper pushing flunkies would be happier for you doing all the work, but it's really about the numbers that get printed at the end of the year. A "97% students employed through Jobmine" looks much better than a 84%. (This is also why, while technically you only need 5 workterms to graduate, you are highly discouraged from taking a term off to "recharge your batteries"…)

Tuition fees are also apparently going up again, and a question arises as to what results would come of it. Existing departments are facing budget cuts, because of increased funding going to new departments and buildings. Money is being poured into graduate studies, while undergrads see little, if any returns on their investment in their Alma Mater. All those engineering buildings are scheduled for 2010, but realistically, those of us graduating before 2012 are unlikely to get the most out of them. To be honest, I don't know what exactly the University is doing with my tuition money, and I'm sure quite a few of my peers would agree. Maybe someone from a student newspaper should do an exposé article (insert irony here).

All in all, the University is a bureaucracy, where administration rules; there's no doubt about that. In the meantime, I can get on with my degree, and stop once in a while to have a long chat about everything with a forgotten friend. And, when I get sick enough of my conformity and status quo, I'll set about tackling Needles Hall.

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report

TYLER GALE
PRESIDENT

A few topics of substance for your reading pleasure…

UW to host Ontario Engineering Competition 2010

Congratulations are due for the team of 2011 UW engineering students who put forth a bid to host the 2010 Ontario engineering competition (OEC). Armed with letters of support from the Dean of engineering, the president of the university, and the engineering society, this team put together a gorgeous 38 page bid package and made a presentation for the OEC board of directors earlier this March. I wish them all the best in their planning over the next two years. UW has had a remarkable level of involvement in engineering competitions over the last few years, having hosted the OEC competition in 2005 and the Canadian engineering competition just a couple of weeks ago.

Motions and mandates discussed at last week's Council meeting

A few motions were put forth for discussion at last week's society meeting. First, there was a motion for The Iron Warrior to be included in the Society constitution as "the Engineering Society's official publication." This was first brought up a month ago at the third meeting of the term, and was subject to quite a bit of discussion. The motion was voted on and rejected, under the main argument that a statement of this nature does not belong in an organization's constitution.

The second motion was brought forth mandated the executive to create a policy manual. Currently the Engineering Society has a set of policies used to govern activity such as use of our bulletin boards for poster space. A policy manual will be an opportunity to bring a more unified structure to the policies that the A and B societies use as a basis for PR decisions, and to expand our policies to some internal practices. This motion passed.

The third motion was also passed, and mandated the executive to create a link between the Engineering Society and the entrepreneurship-council (E-council). Over the coming work term we will be looking into what will be the most suitable way to do this, whether to add it to the tasks for an existing director, or create a new one.

The fourth motion was a set of updates to The Iron Warrior's Policy Manual. It was the first reading of this motion, and voting will occur at the Pot Luck Council meeting.

Progress with a new Engineering Society Website

The engineering society has been working towards building a new website over the last couple of months. The first stage of the project is to modify the website layout and renew the content with updates to text and addition of pictures. There has been good progress on this front, and we are hoping to have a beta of the new site go public in time for the Pot Luck meeting.

Larry Smith Speaks on the topic of Career Strategies for Good Times and Bad

Two weeks ago the Engineering Society hosted a seminar that featured Larry Smith speaking on the topic of career strategies. Video recorded at this presentation will be available online soon. You can also read about it on page 3 of this issue.

This seminar was held because I was approached by a few students who suggested that the Engineering Society should contact Larry Smith regarding this topic. The Engineering Society (as well as all other faculty student societies), has the basic mandate of enriching the university experience of all of its members, by providing opportunities outside of the academic classroom.

We are always on call for new ways of fulfilling this mandate, and are always open to suggestions. So if you have an idea, please do not hesitate to contact me.

asoc_prez@engmail.uwaterloo.ca

VPX Report

DAVE HALFORD
VP EXTERNAL

I hope that everyone had a safe and happy long weekend. The first thing that I would like to say this week is congratulations to Sarah Scharf for her acclamation and ratification as VP Internal. We had a lot of events going on the week before last and there are a lot of thank you's that need to be sent out.

I would first like to thank my Bus Push Directors Ben Brady, Curtis Knischewsky, Steph Borgs and Jay Shaw for running an awesome event on Saturday March 15. They were able to raise about $2000 for Sleeping Children Around the World and completed the pull in what very well might have been a record time of 1hr.

Secondly I would like to thank the team from WASA that I worked with to organize Archineering which happened on Friday March 15. The event turned out to be a jumping party with a lot of students in attendance. Everyone seemed to have a great time and we were able to collect a large amount of food for the local food bank.

Genious Bowl occurred on Mach 13 and I would just like to congratulate the directors for putting on an awesome event. Team Exec had an awesome time!

The event that I have to announce for the term is Canstruction which is happening this Friday at the Conestoga Mall. We will be joining with members of WASA to build a sculpture out of non-perishable food items in a competition to benefit the local food bank.

Finally I would just like to wish the grads an awesome time at Grad Ball this weekend.

VPI Report

LEE ANNE BELCOURT
VP INTERNAL

As the term is beginning to wrap up, there are definitely some times worth marking off of your busy schedules for upcoming events. EngPlay is going to be happening on the weekend of April 4th and 5th. Similar to last time, it will be a series of short, funny skits. Tickets will be $5 in advance and they will be sold in a number of locations during the week before the event. The last event of the term is going to be held by the Engineering Jazz Band; they are going to be holding a charity gig at Hagey Hall on April 8th.

Genius Bowl reached new heights this term with a record participation of 39 teams. The directors switched it up with a new section of Waterloo trivia and high stakes jeopardy rounds. This week's Cracker and Cheese Social should also prove to be a success filled with laughs and tasty food and beverages.

At last week's EngSoc meeting, Sarah Scharf was officially ratified as the new VP-Internal for the fall 2008 term. She has been very involved with EngSoc and is enthusiastic about her new position. I am confident that her dedication and friendliness will make her a great fit for the job and I wish her all the best.

Since this will be my last article from this perspective, I am going to emphasize the appreciation that I have for all of the hard work that my directors have put in throughout the term. It was a great experience to work closely with many of you and I hope you will continue to help out with Society events in the future. For those of you who I was not able to co-ordinate with, I apologize and look forward to finding more suitable options for the terms to come. Finally, I would like to thank my co-Executive for the opportunity to work with awesome, energetic team members. It was a fun and rewarding term that I will remember for years to come.

VPEd Report

JEFFREY LIPNICKY
VP EDUCATION

Here is my final exec report for the term, so I am going to make it straight to the point. This term has been a tremendous experience for me in learning how to fulfill my duties as VP-Ed, learning how to work with and manage directors, and learning the bureaucratic process within the Faculty and the University.

PDEng Independent Review: the PDEng staff are finishing up the Self Study and should have it finalized at any time. Former EngSoc President Nick Lawlor is on the PDEng staff and is assisting in writing the Student Concerns section of this Self Study. This document is not anticipated to be available to students, but it will be given to all departments. Students have been given the opportunity to provide feedback to the external reviewers in the form of written responses. All students who have completed a PDENG course in F07 or W08 have received an email from Assoc. Dean Wayne Loucks outlining the process. More info is contained in this issue.

Debt Load Surveys: Thank you to everyone who took their time to fill out these very important surveys. The Dean does look at the these results to compare our debt load to those at other institutions. Sadly, we only had approximately 15% participation this term. I understand that it can be difficult to have your classmates to fill things out, but next term hopefully we will be able to have a better turn out. The results from the survey are contained in this issue.

Directors: I would like to thank all of my directors for this term. It hast been great working with you and hopefully we can work together in the future. Also, I look forward to seeing people apply to be directors for the Fall!!!

Study/Social Space Forum: FedS VP-Education, Jonah Levine, has been collecting data from students about study and social space on campus. There will be an open forum on Thursday April 3rd at lunch to collect data from Engineering Students. It will be an open forum for everyone to come out and give feedback. There will be some food provided as well. Stay tuned for more information.

And now for a little joke: One night a bolt walked into a bar and asked for a drink. The bartender asked, "what brings you in?" The bolt replied, "I just got in a fight with my washer and she took my nuts." Bad-um-chi.

All the best on the work term. Enjoy your summers!

VPF Report

ADAM MELNIK
VP FINANCE

What a term it has been!! Thanks to everyone who participated in and organized events, fun was had by all and several lovely lunches were served.

To allow you to get back to persistently preparing for finals I will keep things as short as possible on the business side. As seen in the Figure below, yours truly is pictured doing his absolute finest in managing EngSoc fiscal policy in 2008. I would like to take this opportunity to guarantee you that we are definitely on the road to a balanced budget… but this will not be so without your continued support. Please submit expense forms with appropriate receipts by no later than Tuesday April 1, 2008. Expense forms can be found at http://engsoc.uwaterloo.ca/www/society.php and hard copies are also available in the Orifice. Please ensure that accounts can be balanced well before finals consume our world – get your receipts in!!

Best of luck writing final exams and pursuing your next term of cooperative education! Avoid summertime blues in far off cities by signing up to arrange or attend a WatPUB event. For more information see http://www.watpubs.uwaterloo.ca/!

I have had an excellent four months in my role as VP Finance and look forward to a second on-stream term in the Fall. Thank you for offering me this opportunity. Look out for the new computers soon arriving in the Orifice and SIGG water bottles in Novelties available before the Spring term!

"Life is either a daring adventure or nothing."

– Helen Keller

Introducing Your New EngSoc "A" VP Internal

SARAH SCHARF
2A ELECTRICAL

In case there are still some people who do not know, Lee Anne Belcourt, the current VPI, is going to Germany on an exchange and will not be around in the Fall. This means a new Engineering Society A Vice President Internal is needed. Voila, c'est moi! Yes, I am lucky enough to take over the role of VPI for the Fall 2008 term. I have been thinking about running for an executive position for a while, and I think this is a great opportunity for me to try my hand at it.

Before I get into my ideas for next term, here is a bit about me. I am in the 2011 Electrical Engineering class, I am from Ottawa, and I've known UW was where I wanted to be for many years. I am the academic rep for my class, as well as the WEEF rep (WEEF is GOOD!). This term I was one of three directors for the Wild Wild West Engineering Semi Formal, and I'm sure all who attended thought it was great. I had an awesome team to work with, and everything went very smoothly. Even though this is the only directorship I have ever held, I have been to many EngSoc events since I came to UW, and I have a feel for what events happen and when an event was run well.

Besides having experience with how things are currently run, I also have plans to improve EngSoc A participation. I believe that working with the class reps and making sure that they are aware of what's going on is key to getting word out of EngSoc events. Posters work when people look at them, but if there are too many posters up people may not see the right ones. Also, I feel it is important not to plan too many events. Even though having fun is required for an awesome university experience, UW Engineering students still have a lot of work to do. More people will come out to events if they don't get overwhelmed hearing about 5 in one week.

While I am VPI next Fall, I am going to be spending a lot of time in The Orifice. I want to make sure that I am available for my directors, as well as for students that have questions regarding upcoming events. I am going to encourage my directors to start planning next term's events very early, and hopefully this will lessen scheduling conflicts.

My goals for next term are to be prevalent and available, help my directors when they need it, and increase event turnout. All EngSoc events that I have ever gone to have been great, and more people should be able to enjoy them. I look forward to getting even more involved with EngSoc as VPI, and I think next term is going to be awesome!

WEEF Report

BRANDON DEHART
WEEF DIRECTOR

Hey folks, I hope you can excuse my bad play on words. It was likely brought on by a lack of sleep and the fact that I'm writing this on Easter Weekend. Many things have happened since my last report so I'm going to jump right into it.

First off, proposals closed on the 11th and we had a whopping $290k in requests! That's almost three and a half times as much as we currently give out in a term, which meant that the WEEF Funding Council had its hands full trying to decide who should get how much money. The results of the funding council's decision are shown in the chart to the right, with any proposals that received no funding removed from the list. If you would like to see what other proposals there were this term, they will be up on the website soon.

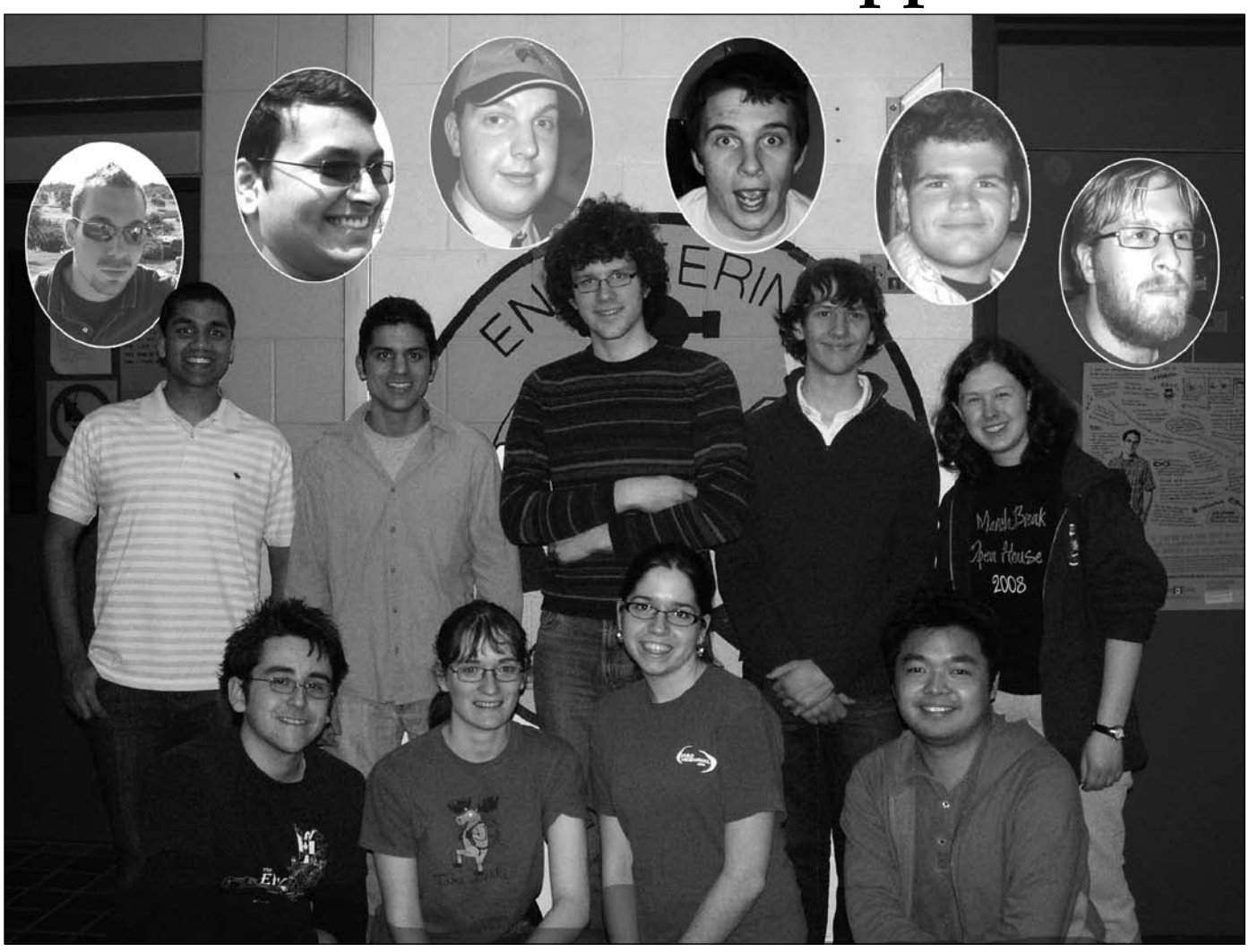
In much more pressing news (especially for all of you Ringed fourth-years that will be taking off soon) there are "I Support WEEF" patches available in novelties now. There is a limited supply, however, so you will have to get them fast before they run out. If there is a huge demand for them then I will order more, but for the fourth years this will likely be your only chance to get one right hot off the presses. And by presses, I mean embroidery machines of course...

Finally, in addition to the new Student Machine Shop that is going to be built in the Student Design Center being officially named the "WEEF Student Machine Shop", the WEEF office will actually be moving into the second floor of the new building. More details on the building can be found in the cover story.

That's all for now, and remember folks: TNSTAAFL!

Proposal	Requested	Allocated
Engineering Departments		
Architecture		
Cameras and Equipment	$5,332.92	$5,332.92
Assortment of Lee Valley Clamps	$324.12	$324.12
Lee Valley Trammel Point Set	$89.28	$89.28
Benchtop Band Saw	$293.79	$293.79
Bessey K-Body Bar Clamps	$1,720.40	$860.20
Router, Router Table Top, and Accessories	$1,013.61	$1,013.61
Chemical Engineering		
Mechanical Shaker for CHE390 Lab	$4,560.00	$2,700.00
Membrane Gas Separation Experiment	$4,820.00	$4,820.00
Civil and Environmental Engineering		
Stapler for Civil Assignment Drop Box	$45.58	$45.58
Electrical and Computer Engineering		
RF Vector Signal Generator for ECE Undergrad Labs	$47,776.00	$23,813.00
Handheld Digital Multimeters for ECE Undergrad Labs	$3,780.00	$3,000.00
E & CE Nexus Computer Upgrade	$8,000.00	$6,000.00
Mechanical and Mechatronics Engineering		
New Data Acquisition Equipment For Mech Engineering Labs	$4,017.30	$4,017.30
Systems Design Engineering		
Systems Computer Lab PCs Upgrade	$12,000.00	$6,000.00
Cross Departmental Projects		
Engineering Society Replacement Computers And Printer	$6,700.00	$3,350.00
Departments Total	$219,844.19	$61,659.80
Engineering Student Teams		
Wombat	$3,039.00	$2,000.00
Clean Snowmobile: Sound Level Meter and Dynamometer	$10,000.00	$5,000.00
Midnight Sun: Solar Cells, MPPTs, and Entry Fee	$12,000.00	$3,000.00
Nanorobitcs Group: Microfluidic System Fabrication	$2,407.80	$2,407.80
UW Robotics Team	$4,000.00	$1,200.00
Formula SAE Team	$7,000.00	$4,000.00
UWAFT: Test Stand and Computer	$6,070.00	$1,570.00
(UW)2TT: Parts Request	$2,450.00	$950.00
WARG: Construction Supplies and Materials	$4,640.00	$3,000.00
WERC: Innovative Technologies for an Existing Building	$1,350.00	$300.00
Student Teams Total	$69,885.84	$23,427.80
Grand Total	**$289,730.03**	**$85,087.60**

Iron Warrior Staff Appreciation Section



DAVID MORRIS
EDITOR-IN-CHIEF

Along with the last issue of the term comes a "thank you" for all the hard work that everyone put into the paer. The newspaper couldn't have happened without all your hard work and dedication.

Chris: Good job with all the hilarious articles; it's too bad you didn't start writing earlier in the term.

Om: Thanks for the first-hand reporting!

Rory: I can appreciate the subtleties and histories beer much more thanks to you.

Mike: Thanks for all the photoshopping!

Kevin: High quality, high quantity; you've been invaluable.

Bahman: You've picked up any and all slack I've created, and have devoted countless days to the paper.

Stuart: Congratulations on the position of Editor-In-Chief for the Fall term; you've earned it!

Jaclyn, Paul, Alex, Dan, and Jay: Thanks for the regular, dependable, high-quality articles!

Mikayla: Thanks for all the proofing and PROPS work! Sorry that I don't have your picture to include!

Sunny: Thanks for the articles and help, and good luck during your summer term as EIC!

Michelle: Thanks for taking all those notes!

Alex: Good job with the puzzles!

The Complexities of Foosball

CHARLES DOURADO
2A GEOLOGICAL

If someone has ever told you that foosball is just a game, they are mistaken. It is something much more beautiful than just a mere game; it is a sport, it is war, it is a way of life....it is foosball. Deep within the bowels of POETS, past the fields of sofas and skies of former t-shirt design, rests engineering's striking foosball table. Although the table is scarred from war and not quite perfectly level, it still remains an agile, playable work of art. I have spent many hours at the helm of this masterpiece and I am eager to pass on some tips and knowledge that I have acquired through my experienced, yet incomplete foosball travels.

Why play foosball? I find foosball is great in almost any engineering situation. If you need to shed some nerves before a big test – play some foos. Afraid you failed said test? Foos will console you. Inebriated during Pubcrawl? There are tables at KickOffs, the Vault, the Spur and McMullens! It's the most fun you can have with your hard hat on.

If I had to sum up foosball in one word other than foosball, I would choose honour. Taking hold of the foosball rods is comparable to the unsheathing of a samurai blade… a life of discipline and respect will lead to a swift, honourable victory on the battle field. There are very few things in Waterloo engineering that I find more satisfying than conquering a worthy opponent in an epic game of table football. Part of the satisfaction arises from knowing that all the time and hard work I have put into mastering the craft has paid off. It may sound cliché but such grand games of foosball have no loser. In a game played honourably, respectably and beautifully both parties will walk away with a rewarding experience.

Mental awareness is a cornerstone in any foosball warrior's arsenal. The key to penetrating your opponent's defences while holding down your own fort is getting into your opponents mind. You must open your mind to the enemy's psyche -- observe what they are capable of doing and make adjustments to your own tactics to exploit weaknesses. If you can't score on your opponent then analyze their defence, look for any gaps or predictable movements, and try some new moves.

Timing and power behind every stroke and flick is to be a conscious effort towards control. The wrist flick is a primal move which must be developed – though gaining this technique is difficult at first, with experience, this action becomes an instinctual extension of movement. Following this, each player establishes their own unique timing and alignment.

Practice. Practice daily. For 5000 dollars a term you can bet that I'm going to get my money's worth in foosball playing time… you should too! Practice will make you better at everything in foosball. You will become faster, more powerful and add more moves to your repertoire. With time it becomes easier to read the table and your opponent. The priority of practicing should rest with consistency – if you find a move that works for you make sure you can execute it on a regular basis.

There are several rules in foosball but they all serve the same purpose – cleaning up the game so that at the end of the day the winner knows that victory was earned, not taken. Rules should be agreed upon by both parties prior to the start of the game to reduce any discrepancies that may occur. Common rules used at most tables are no spinning of rods, both teams must touch the ball before scoring, bank shots and 5-bar shots don't count. If in doubt about a rule, or whether or not a goal should count, keep in mind that the game is meant to be played honourably.

Trash talk is a delicate facet of foosball. I would like to stress that it is a gentleman's game so moderation and class is key. To keep from looking like a pompous arrogant jerk, I find that a careful dose of wit works best at the table. In more casual, colloquial games, feel free to liven up the atmosphere by letting the slander run wild. Disclaimer – you will look like a fool if your trash talk is not backed up with skill.

Play people that are better than you – I accept all challenges. This is the best way to observe successful techniques and learn new strategies. Although it may be intimidating, most players are more than willing to give tips to the less experienced. Many of the regular players at POETS are now have their pinky ring bling and will soon be departing which leaves the table yearning for new blood. If you haven't yet I implore you to explore the table, soak up a part of Waterloo engineering culture and join the eternal struggle between red and blue.

Engineering Still Interested in Grad House Site

PRIORITIES
Continued from Page 7

As far as Engineering's interest in the Graduate House site, Venter was quick to say that the Faculty has not given up on it: "We will always need planned growth, and that site is not going to disappear. So the Faculty remains very interested in its development to benefit all aspects of the campus, and the Dean is always at the table to express this interest."

Engineering VII

E7 will only be built after the space needs of Chemical Engineering have been alleviated with the construction of E6. The planning process for E7 will be minimal, because one of the guiding principles behind the expansion plan dictates that consolidation is important, and so the departments occupying floors three to six in E5 will gain the complementary space in E7, with the two buildings linked with two small corridors on the north and south ends, and a major passageway at the centre.

The usage of the two lower floors of E7 will still have to be finalized, as the SDC will not be extending into the building. Covered parking is an option, but the Faculty is not willing to pay for it, when costs can run as much $30,000 per parking spot. However, if the University wants to put the cash forward to regain some of the parking space that will be lost with the expansion on Parking Lot B, the Faculty is receptive to the idea. Another possibility is to use the lower two floors for the Faculty, which could range from space for the Dean's administrative staff to more computer labs. "This type of use would certainly shift the centre of gravity of the Faculty even more towards Parking Lot B, but it is all dependent on what might happen with the Graduate House site in the years immediately ahead," Venter stated.

Once E7 is built, the space in between the two twin buildings will make for a nice atrium, and there is the possibility of a second Engineering Society C&D or a Food Services location in the space.

Other Priorities

Getting E5, E6, and E7 built are currently the three top priorities of the Faculty as part of the expansion plan. But the idea has always been a domino effect where as some departments vacate their old space in E2, CPH, and DWE and move into these new buildings, other departments reorganize within that space which would be renovated. So the fourth priority for the Faculty is the renovation of DWE, especially the C-Wing, once it has been vacated by Chemical Engineering, so the space can be used by other departments. Should it be proven to be more cost-effective, this priority may actually jump ahead of the construction of E7.

"When we started on the space plan, we told all departments that they could not all acquire space at once, but that each might anticipate incremental gains until the final objectives were achieved," Gooding explained. Thus, the departments gaining space in E5 understand that the Department of Civil and Environmental Engineering and the Department of Management Sciences will be gaining by the consolidation of their space in the current Engineering buildings.

The fifth priority of the Faculty is to shell in the floors of E6 so that Chemical Engineering can comfortably expand into the space. However, this may not even be a necessary step if enough money is raised by the time the building is that far in the planning stages. "Quite honestly, if we start planning the building now, by the time we get to building it, there will be nothing left and we will have built the whole thing without having it shelled in," Venter advised. "But it's the accountability and the planning that's important." Once the initial skeleton of E6 is filled in, the sixth priority is to plan for the extension of E6 to handle Chemical Engineering's expected international expansion.

The final priority of the Faculty is to actively participate in the development of the Graduate House site to not lose it as a future option for expansion. "If Engineering doesn't continue to show interest, we'll lose momentum," Venter said. "So we'll show sufficient interest anytime the issue comes up."

It is clear that over the next five years, an enormous amount of change will be brought to the University of Waterloo campus, with the Faculty of Engineering playing a major role. Students, faculty, and staff should take comfort in the fact that it is very apparent that the Faculty is looking ahead and planning for the long term with a broad vision for the future.

STI & Partners, the architects of E5, along with the Faculty of Engineering, will be holding an open student forum on Thursday, April 3rd, at 4:30pm in RCH 302.

Debt Load Survey Results

1 Term Total

Total Responses	467
Number of surveys sent	3207
Response %	15%

2 Does your family support you financially? (457 responses)

Yes	60%	No	39%

3 Average Cost of Living for a 4 month School Term (462 responses)

$8,301

4 Average Cost of Living for a 4 month Work Term (344 responses)

$3,701

5 Have you applied for local aid or other bursaries to pay for school? (464 responses)

Yes	41%	No	44%	Not Yet	14%

6 Have you applied for OSAP? (465 responses)

Yes & Received	34%	Yes & Denied	15%
No	51%		

7 Do you have a loan for academic purposes? (454 responses)

Yes	38%	No	49%	Not Yet	13%

7a How much is the student loan? (232 responses)

1-499	8%	500-999	4%
1000-1999	5%	2000-4999	27%
5000-9999	34%	10000+	22%

8 Has the differential tuition increases caused you hardship? (457 responses)

Yes	38%	No	30%	Not Yet	32%

9 How much debt do you expect to be in by graduation? (448 responses)

No Debt	27%	<999	4%
1000-4999	13%	5000-9999	15%
10000-19999	22%	20000+	18%

10 Do you live at home while at school? (466 responses)

Usually	9%	Used to	1%
No	90%		

11 Have you lived at home while on work terms? (466 responses)

Always	14%	Sometimes	40%
Never	46%		

12 Average of the weekly salary while on work term (298 responses)

$646

Crossword Solutions

Last Issue

This Issue

Better Know a Beer: Devil's Pale Ale 666

RORY ARNOLD
3B MECHANICAL

I had a lot of trouble deciding on the topic for this article. Normally I would want to do a discount brand for my final article, but I didn't think anybody really wanted to read about that. I considered one of the beers I tried at one of the numerous tastings I had attended this term. I enjoyed some truly great beers from all over the world, but I felt a domestic would be more appropriate. So instead of looking to what I could do, I looked at what I have done. In my last article I talked about Guinness Draught, which I'm pretty sure is God's beer of choice. So this week I'm going to do the Devil's beer of choice, Devil's Pale Ale 666, brewed by Great Lakes Brewery in Toronto.

The Great Lakes Brewery was opened in 1987 by the Bulut family to become Toronto's first craft brewery. They use a disciplined small batch brewing process, which uses copper kettles over an open flame. They use natural products from local producers and in recent years have won prestige awards with its line-up of excellent beers. The popularity of their Golden Horseshow Premium Lager spurred them to add two more lagers to their lineup, Red Leaf Smooth Lager and Black Jack Black Lager, which won a bronze metal at the 2006 World Beer Cup, catapulting the brewery onto the international beer scene. Besides that Great Lakes Brewery has won numerous medal at the Canadian Brewing Awards.

Devil's Pale Ale 666 was their first ale, first brewed in 2006 as a seasonal ale, but due to its popularity will now be brewed all year long. The name comes from the recipe used to create this beer, 666 kg of malt, 6.66 kg of hops, 66.6 minutes of boiling, 6% abv, and was created on June 6th, 2006. Since then they have started brewing two more seasonal ales, Orange Peel Ale, brewed in the spring, and their answer to a cold Canadian winter, Winter Ale. While all their beers are available on draught, Devil's Pale Ale is the only one available in a can at the LCBO instead of a bottle.

Devil's Pale Ale 666 is made in the same style as early English pale ales. A pale ale is considered one of the major beer styles which includes English bitter, India pale ale, altbier, and amber ale, among others. To be considered a pale ale, the beer must be brewed using top fermenting yeasts and light brown or dark red in colour, darker then a golden lager, but lighter then stout. This is done by using pale malts which are the most common British barley malt. Devil's Pale Ale 666 is brewed using 6 types of malts and 4 types of hops. The most significant variety of hops, and the reason for bitterness of this brew is an American variety named Millennium, which is high in the bitter alpha acid. It also contains a background of a spicy variety named Hersbrucker, which is traditionally used in German pale lagers.

Pouring a Devil's Pale Ale 666 into a pint glass shows off the beer's beautiful mahogany colour with a thick, creamy off white head. I detected a slight hoppy aroma, but I really had to get my nose in the glass to find it. The first sip gave a full malty flavour with a slight bitter finish. There was a slight aftertaste, which faintly lingered on the back of my toungue but was not unappealing. This would be a good beer to start with if you are not used to bitter styles before you move onto something stronger. Some will argue whether it is a pale ale or a brown ale, but I find it too hoppy to consider it a brown ale. It is a stronger pale ale at 6% abv and is a great beer to drink chilled with pork. I give this beer a final score of 8.2. While I did enjoy the slight bitter taste, this beer did nothing to challenge my palate; a stronger aroma would also help. However, it was a very attractive beer in the glass and is sold in a well-designed can. As well, Devil's Pale Ale 666 is a smooth drinking ale that leaves a satisfying taste in your mouth.

I'm not sure if the Devil drinks the ale that he inspired, but if he doesn't he may want to give it a try.

We're Not Bible Thumpers: Jesus on Tap

JACLYN SHARPE
3B MECHANICAL

You may have seen posters around inviting you to BYOB (bring your own bible) to POETS on Thursdays and BYOB (buy your own beer). And you were probably wondering what kind of nefarious plans were in the works to convert you to Christianity. The truth however is far less sensational.

Jesus on Tap is not affiliated with any other organisations, it's just a couple of engineering students (one current and one former) who wanted to start a general discussion in engineering about who Jesus is. Most people only discuss this kind of thing among their friends, they commented, so they wanted to open the discussion up between more students.

The organisers asked the POETS managers if they could use the upstairs lounge area in POETS for their meetings, and were told that it would not be a problem.

The decision to include beer in the plan was two fold. The first was that engineers like beer, so holding the discussion over a cold one seemed like the natural decision. The other was to escape the view that Christians are uptight and no fun. "We're not mean bible thumpers", is the message they're trying to get across.

Though the feedback has not been overly negative, one of the organizers was booed by his class when he invited them to the first meeting. One person in the class yelled out "Stop trying to convert us!"

Jesus on Tap held its first meeting on March 13th, and though the membership is still very small, it is increasing. Each week the discussion is themed, and questions are provided (with relevant bible passages) to generate discussion. The first two topics were beer and sex, with money being a possible future topic.

Jill Smells at Genius Bowl XII

A Tale of a Team's Complete and Utter Collapse Under Adversity

"THE" CHRIS BENETEAU
4B MECHANICAL

Genius Bowl: A Tale of Complete and Utter Collapse Under Adversity

7:42am

The sun peaks through the curtains of my second-floor bedroom. The alarm clock sounds-off like a klaxon, interrupting the morning silence. Waking up for my two-hour lecture of fourth-year managerial science is normally a chore, but today is no ordinary day. Today is about unfinished business. Today is about Genius Bowl.

10:31am

I pass Jill in the hall.

Jill is our team's expert on all things popular culture. She's been a part of the team since its inception in second-year, and has seen its highest highs and lowest lows.

The Bizarro 4B Mech '08 team with the Genius Bowl trophy we gave away.

Flashback

March 17, 2006

The day after following our near-triumph at Genius Bowl, the team celebrates by spending its second-place winnings on a seemingly endless flow of beer. Jason, a close friend of the team, is forcibly removed from the Bombshelter Pub after attempting to sober-up by driving an imaginary Corvette complete with engine noises. This is a St. Patrick's Day to remember.

I look Jill in the eyes and ask, "Are you ready?" Each and every word is heavy with the seriousness of our task.

"I've been ready for this moment my whole life," she replies without batting an eye. I believe her.

4:27pm

The team assembles in the fourth-year study room. Brian, Adrian, Jill, Brock, and I group around the couches, coolly chatting about strategies for the battle to come. Using my laptop, I perform some last-minute cramming of African capitals – obscure cities have been fixtures in past genius bowls. I look up to see Brian chatting with Brock. His cool exterior hides what must be a boiling lake of anticipation for the evening's event.

Brian is the backbone of the team. His knowledge of history, geography, and obscure facts sets him apart from crowd. He is also a master of the individual jeopardy rounds that occur between the main team-based question sets and his performances had played key roles in past podium performances.

Brock is our resident sports expert. Whether the answer is the Cleveland Barons or the Atlanta Flames, Brock is a sure bet to pull us through the most obscure mental challenges.

My eyes pass over to Adrian, who's chuckling light-heartedly with Jill. Adrian is the newest member of the team, having joined just in time to push the team to its best-ever finish back in the spring of 2006. An all-around player, Adrian seems to have a knack for coming up with a little-known inventor or license plate motto while the rest of the team is left scratching our heads.

Only Aditya is missing. But a quick phone call confirms that our secret weapon of foreign languages and weird science will indeed be arriving for the night's task. The team breathes a collective sigh of relief, but the feeling doesn't last. Too much is riding on tonight, so much left to accomplish. This will be our last Genius Bowl, and our last chance to achieve the ultimate prize.

Team Jill Smells is ready for action.

6:11pm

The teams assemble in the David Sheridan Centre lecture hall – all 41 of them. That tally makes this the largest Genius Bowl ever. The competition this year will be more intense, more fiercely-contested. We look over to the 4B Chems, who had beaten us in previous years. We glance at the off-stream 4B Mechs, who have won their own competition in previous years. Then we look ahead – ready to beat them all.

6:41pm

The first round is complete. Despite some jitters that saw lost points on the first Canadian Prime Minister born in the twentieth century (Trudeau, not Diefenbaker – what an amateur mistake) the first round sees us score fourteen points on the fifteen questions. In order to be crowned champions, these performances will have to continue.

7:07pm

Round two, thanks to some fortunate guesses and our broad knowledge base, goes passably-well. By our calculations we score thirteen points, a slight drop but understandable given the higher difficulty level. No scores have yet been displayed, but we're hopeful to be within striking distance of the leaders.

7:09pm

Disaster strikes. Brian, our ace in the hole, returns from the Jeopardy round looking shaken. He shakes his head and utters, "We just lost eight points."

In previous years, the format has been to buzz-in, with incorrect answers being penalized. This year, players decided how much to wager and then wrote-in their answers once the question was displayed.

In a disproportionately difficult series of questions, Brian strikes out on each of the four questions. The team looks shattered.

7:11pm

A glimmer of hope. The scores are displayed after round two. Technical difficulties prevent Team Jill Smells from appearing on the score sheet for the individual rounds, and the team assumes the worst. Then, against all odds, the cumulative scores and displayed and reveal our team's three point lead over the rest of the field. Doing some quick math, we realize that the scores can't account for our eight-point loss in the jeopardy round, but at the very least we're still within striking distance. Morale soars and our focus is redoubled.

7:34pm

Round three is a miserable one. The questions are obscure and our guesses are just off the mark. In sports, the goal post can be a cruel mistress – in genius bowl, the guess can be a real bitch. Bahman Hadji, the master of ceremonies for the evening, provides some inter-round entertainment to allow scores to be tallied by pointing out various team's attire. He spots Team Jill Smells and our refusal to degrade ourselves by wearing ridiculous costumes. He calls out to me, "What are you guys supposed to be?"

"Your mother," I reply with venom dripping from each syllable.

"My mother," he repeats into the microphone for the benefit of the crowd. "I don't think my mother would wear her hat like that," he says referring to my slightly off-center cap. The crowd responds with a collective giggle to his return volley.

"That's okay," I explain. "The main part of my costume is the army boots." The crowd erupts and Bahman glares icily in our direction.

Even belittling Bahman can't salvage our scores though. Round four will have to be a biggie and we'll need some luck.

7:41pm

We score no points in round four. No other teams score either, as this year's administration has decided to cancel the round in the interest of speeding up the process. Instead of two rounds to rescue our championship bid, we have one.

7:50pm

And now we have no rounds left for our final push to victory. The traditional round five has been replaced by a "special" Waterloo round, where the teams are asked questions about our University's history. Teams are seeded, and so only the top four teams will have a shot at the ultimate prize. Team Jill Smells quickly completes the round and then leaves the hall.

Dénouement

In the end it's unimportant who won or lost, mostly because we didn't win. In the days that follow, various team members blame the administration, performance-enhancing drugs, but mostly Brian for costing our final grasp at glory eight points.

Jill turned to various recreational drugs to cope with the pain. Three years after the event, she found herself mumbling incoherently in Tijuana where she resides today with many cats.

Brock found solace at the bottom of a bottle and drank himself into a mascot position with a minor-league franchise in Albuquerque, a position he still holds today.

Adrian would go on to invent a new ice cream scoop for the space program, but his career would come to a screeching halt when the scoop broke and short-circuited the International Space Station, sending the multi-billion dollar construct to burn-up in the atmosphere. He now works as a pirate-for-hire on Indian Ocean shipping lanes.

Other teams wore silly costumes. We did not.

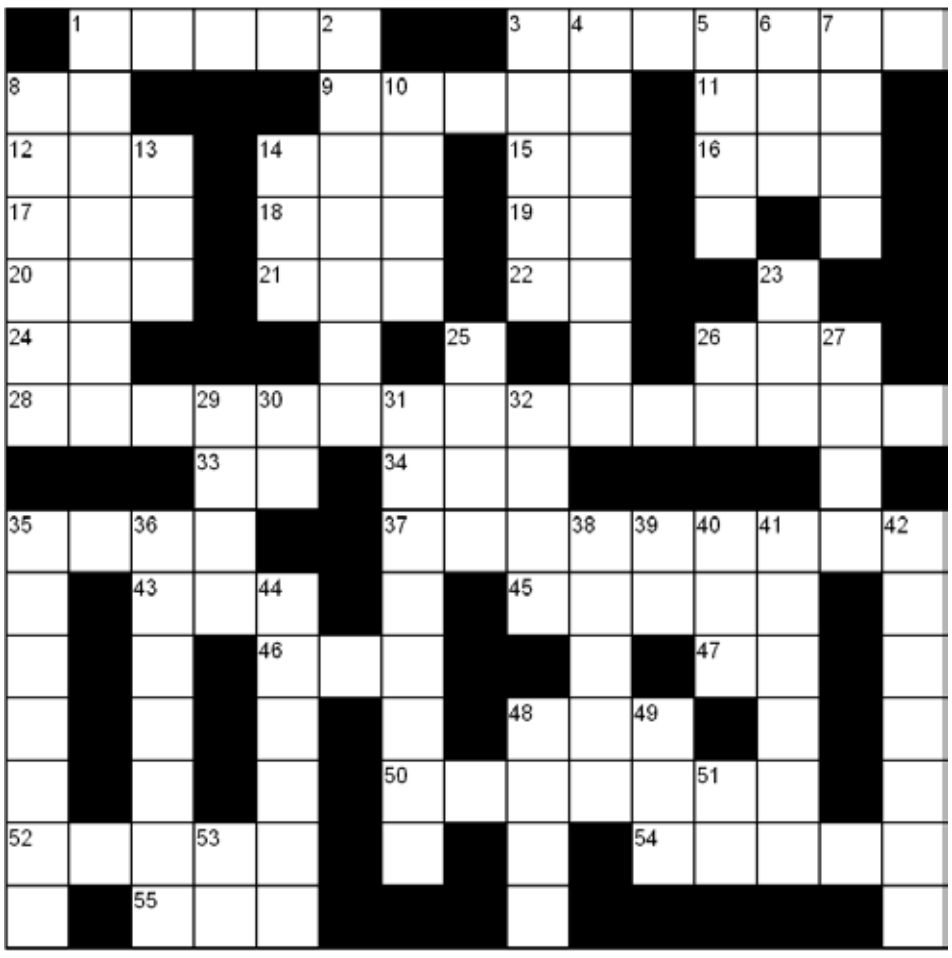
Aditya flirted briefly with success after moving to Hollywood and landing his own pilot called, "All about 'Deech". He couldn't escape his Genius Bowl past, however, and the network, upon discovering the truth, would cancel the series. He is now a fixture on the supermarket autograph tour.

Brian's fall-from-grace would be the most cruel; his attempts to turn his new nickname, "Minus-Eight", into a PGA Tour career failed miserably and he would perish soon thereafter while shouting wildly into the night sky and swinging an iron over his head in a thunderstorm.

As for myself, I'm currently in a full-body cast awaiting sentencing for attempting to steal the Genius Bowl trophy – again. The main failing of my plan had been attempting to escape using a home-made flying saucer. The doctors say that I should be released sometime in the next six months. The psychological scars of Genius Bowl, however, will never fully heal.

The Iron Crossword

THE IRON WARRIOR
A&E BUREAU



Crossword Clues

Across

1 Lab under renovation
3 Toils
8 Acid test
9 Vice __
11 Summer month
12 Grease
14 Volume (abbr.)
15 Element 21 (abbr.)
16 Pixy
17 Pigpen
18 Unpropitious
19 Scottish "one"
20 Bind
21 First woman
22 'Sup.
24 State of being
26 Period
28 Purchaser of Louisiana
33 Yard (abbr.)
34 Maturity
35 Potter's oven
37 Group agreement
43 Tree
45 Brand of paper cups
46 Small amount
47 High-school subject
48 Bar
50 Away from the axel
52 Bundle of yarn
54 Washer's partner
55 Big truck

Down

1 Milky
2 Unfolds
3 Writings
4 Beginning of hockey (2 wds.)
5 Except
6 Computer memory
7 Mistake
8 Brand of sticky notes
10 Women's magazine
13 Caustic substance
14 Contend
23 Distress call
25 Building toys
26 Doctor (abbr.)
27 Meat alternative
29 Asian starling
30 Commercial
31 Period of King James I's rule
32 To ward off
35 Nicest
36 Boiled crustacean
38 American indian
39 Former spouse
40 Tweak
41 Becoming
42 Pistol (2 wds.)
44 Canadian Grammy winner (3 wds.)
48 Animal feet
49 Direct
51 Little Rock locale (abbr.)
53 Roman two

Engineering profQuotes

"Let's talk about the greatest equations ever created, Maxwell's equations. If you think about everything great in our lives, they can all be attributed to Maxwell's equations."
- Raafat Mansour, ECE 493/671

"There are many things I regret in my life... My greatest one was upgrading to Vista"
- Otman Basir, ECE 223

"I made a stupid promise to someone... I think it was God..."
- Maryann Vaughan, ECON 102

[On introducing spherical coordinates]
"Let's use triple integrals to calculate the volume of an elephant. We'll start by assuming the elephant is a sphere!"
- Zoran Miskovic, MATH 217

"You can like it or not like it, but you can't deny it exists... like
the law."
- N. Thomson, ENVE 573

"Because diffusion is squiggly! It can squiggle up or squiggle down.
I really don't care."
- N. Thomson, ENVE 573

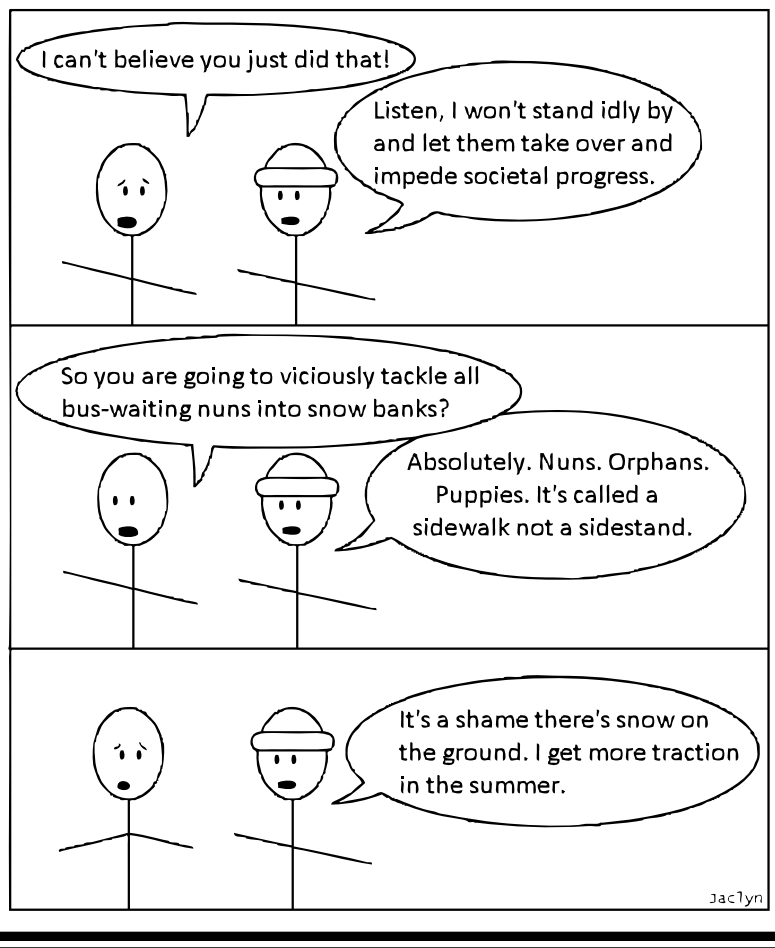
"Sooner or later the problem will go away. Just like humanity."
- J. Sykes, ENVE 577

"So I took the calculus book, the same one you have, and I did every
question. I must have been sick."
- J. Sykes, ENVE 577

[In response to an unnaturally silent class]
"Ah, good, my fly isn't down this time"
- Doug Harder, ECE 250

Sidestand

JACLYN SHARPE AND KEVIN CEDRONE
3B MECHANICAL AND 4B MECHANICAL



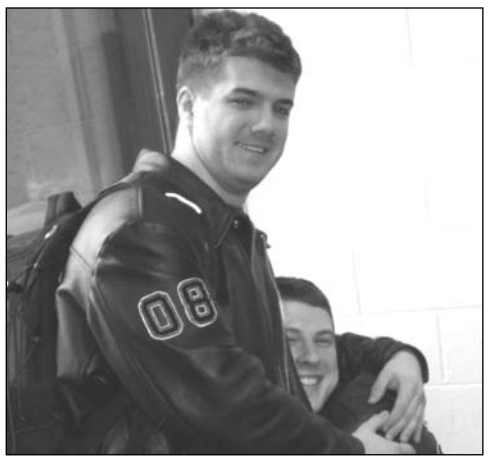
THE IRON INQUISITION

"What will you remember the most about your time at Waterloo?"

David Morris, 2A Electrical

Todd Radigan
4B Computer
"Those few sweet moments before you remember why you're sleeping on the lawn."

Bahman Hadji
4B Computer
"The long nights in the IW office."



Evan Murphy
4B Computer
"Todd."

Mike Speudlove
4B Systems
"Sleeping on a keyboard in the DASL lab."

Cole Stewart
4B Computer
"European Dark."