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the IRON WARRIOR

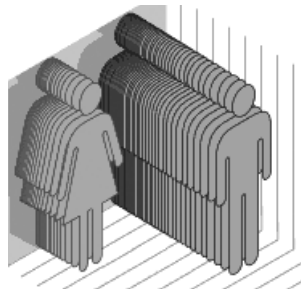
THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

volume 24 issue 7 | 6 June 2003



A Chefs Best Friend

Page 3



Gender Roles in Engineering

Page 6



Our Man in Uganda

Page 8

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Scavenger Hunt: Different name, same old fun.



Mike Henheffer

4A Computer

If you noticed someone wearing a toga on Friday, May 23, chances are they were one of many participants in this term's engineering Scavenger Hunt, entitled "Greco-Roman Scavenger Hunt". Altogether, five teams participated in the hunt. They were 1B Systems, 2B Software, Math, Physics and 2B Mech (actually a team from ComESutra who were pretending to be 2B Mechs). The teams in the hunt not only had to compete against each other, but had to compete against Mother Nature as well. Unfortunately, there was rain during large portions of this term's hunt. Even through all of the rain, the events and the hunters kept going. Fortunately, most of the out-

door events took place before the rain hit.

Speaking of the events, some new events that were a ton of fun were added by the gods. One of these was the siege, which is a small version of orientation week's junkyard wars.

In this event, the hunters had to make a water balloon catapult out of materials supplied by the gods. This event ended with the two teams firing water balloons at each other. And of course, many hunters became targets for the gods and basically threw themselves at water balloons for the gods. Another new event that

was extremely successful was human foosball. This was a game of foosball played with balloons where the participants have to sit in a chair, and hit the balloons without moving off of the chair or

moving the chair. This is one event that will surely live on in future hunts. Many of the old favorite events, such as duct tape to a wall and the egg drop, returned to this hunt and were very well received.

The road trip this term took hunters to many locations in Ontario. Just some of the communities included on the road trip were Aurora, Burlington, Snowball and Troy. To my knowledge, the 1B systems team was the only team that fielded a real road trip and the participants seemed to have a lot fun. Unofficially, the 2B

Mech team sent a group to Kingston for the ESSCO AGM conference, whose members swept the ESSCO executive election on behalf of Waterloo.

The gods of this hunt came mostly

from the 2B Mech class (the real one) and, I must say, did an excellent job running the Scunt. The teams involved all seemed to have a great time throughout the night. I personally had a great time and for that would like to thank all of the gods for running such a great event.

Now, what everyone has been waiting for - the results. After all was said and done and the rain had finally cleared, the gods announced the results of the Scavenger Hunt. From my point of view, it was the closest Hunt I have ever participated in with two teams who put forth a tremendous effort while trying to win. In the end, the 2B Mechs (4A Comps) came out victorious and received the trophy. The second place team was 1B Systems, followed by software, math and physics. I'd like to say that the 1B Systems team put forth a valiant effort and must have made this a very hard decision for the gods to make. I hope to see their team out at future hunts, especially next term when my class is organizing the hunt.

"The teams in the hunt not only had to compete against each other, but had to compete against Mother Nature as well."



That's a whole lot of balloons



Go 2B Mech ... Wait a minute!?!?

How Many Days 'Till IRS

Nick Lawler
2B Civil

Have you ever asked your self what you would do when there was only 1000 days until you're IRS? Well for the class of 2006 the obvious answer is to fill you're face with as many chicken wings as possible. On Thursday May 29th the class of 2006 hosted the Iron Ring Wing Ding in POETS. The goal was to demolish 1000 chicken wings over the course of the afternoon. Although the battle was lost, it must be remembered that it is not the size of the army, it's the fury of its onslaught. All patrons of POETS were very satisfied with

whatever wings they attempted to get their hands on. Apologies must be made to those who did not get wings when they ran out, but the wing supplier could not keep up with the appetites of hungry engineers. All in all, about 700 wings were consumed, and one cook at Molly Blooms will now cringe whenever he hears the word "Iron Ring Wing Ding".

Well minds must now be turned from greasy bar food to more important things, like Fluid Dynamics assignments, and mechanics midterms. However school cannot be all work and no play, with IRS less than 1000 days away we must start to train our livers now for that one fantastic day.



Mmmm...Wings!

"I have never met a man so ignorant that I couldn't learn something from him." - Galileo Galilei

Letter From the Editor

Pie Charts for Everyone!

Jonathan Fishbein

2B Software

Editor-in-Chief



Here is a fact for you: we are students. We spend our whole day in the noble pursuit of knowledge and higher learning. We have no steady jobs and better yet, no steady income. Most of us, luckily, just scrape by financially in our five years of university life. It is no wonder that some of us think of Kraft Dinner as the universal meal. Let's face it, as university students we have chosen to live a life of hard work and little money.

I personally don't mind my newfound financial status. Hey, Kraft Dinner is pretty tasty and who are you to mock my only source of nutrition. The freedom I have received from living on my own at University far outweighs the necessary financial burdens I have to bare.

Unfortunately, I am somewhat troubled with the increasingly complicated state of university tuition. I have been a student at this school for almost two years and have seen my tuition increase significantly during my time here. These increases really shouldn't have come as a surprise to me, or even to any other engineering student. After all, engineering is a deregulated program at this university.

For those of you unaware of the political issues surrounding your increasing tuition, deregulating a program at a university allows a university to increase that programs tuition by any amount they see fit on a yearly basis. Now, deregulated does have one advantage. The most notable problem is that yearly inflation is generally greater than the two percent per year increase cap for regulated tuition. If our tuition had stayed regulated, the university would actually be losing money on a yearly basis, as market prices would inflate at a higher rate than our tuition was increasing. The provincial government, in it's wisdom, decided that it would be best to just deregulate all professional university programs, engineering being one of them.

So the government has paved the way for our tuition increases, but is this really something that should boil our blood? As painful as it is for me to admit it, there are

some slight upsides to deregulation. Now don't get me wrong, I think that deregulated tuition is a bad idea, but the deregulation proponents do have a few valid points.

One of these points is that the provincial government has starkly refused to update their university funding plan. In the eyes of the provincial government, every university student is worth his weight in what is called a Basic Income Unit (BIU). Students in different programs are assigned different BIU values. Using the province's somewhat convoluted university funding formula, these BIUs are translated into money that a university receives per student. The higher the BIU value that your program is assigned, the more money you bring in for the university. As engineering students, our BIU value is close to the top. Tuition is used to add to this provincial funding to more accurately account for the cost to educate a student. If a university feels that they require more money in order to educate their students appropriately, then tuition increases are the only way they can get at this money. Deregulation allows for a university to then set their tuition increases as they see fit.

Obviously, I am troubled by the fact that I have to pay more and more tuition per term, but what I find more troubling is the fact that I have yet to see where my extra money is going. As long as I have been at this school, I don't recall seeing any sort of financial breakdown of where the tuition increases are being spent. Now that I think about, I don't remember seeing any sort of financial tuition breakdown at all.

As students, we love to complain about the university administration, whether we have substantial grievances or unfounded criticism. It's in our nature. But maybe the university administration is somewhat inviting it by leaving us in the dark about how they spend our money. Most fee collecting, student run organizations on campus provide us with a breakdown of where our student fee is going. The Federation of students has a pie chart on their website of where your FEDS fee is going. The Engineering Society provides their budget on their website and lets the EngSoc council approve it. WEEF even goes one better and lets the students fully decide what campus projects should be funded with the endowment money. Why can't the universities finance department

make a pie chart for every program detailing what percentage of their tuition is going where? Why can't the dean of engineering come to the first EngSoc council meeting and tell us about all the new initiatives that the faculty of engineering can now pursue with our tuition increases? Let's face it, if I was well informed about how the university was spending my tuition dollars and tuition increases, I may think twice about blindly criticising them. With a little more transparency, the university could greatly improve its relationship with its students.

So now that we've identified the problem, what can we do to fix it? Luckily for us, as students we do have the mechanisms to make our voices heard about these issues. The first is through our elected engineering senators. These fine people sit on the university senate and have the privilege of representing us on all these issues. We should use our senators better than we do right now. We need to let them now how we feel on these issues and have them relay these thoughts to the university senate. Another mechanism that we have is the Engineering Student Societies' Council of Ontario (ESSCO). This is our provincial voice as engineering students. ESSCO can let engineering societies share how tuition is handled at their individual schools across Ontario and lobby the provincial government for changes to engineering education. If we want to see changes, we need to stand up and show the university that the status quo is insufficient.

Education about the issues is the key. Without knowing what the issues are, there is no way we will ever be able to resolve them. Rather, than blindly criticise the university administration for our increasing tuition, let's research the facts and the issues surrounding it so we can make strong and intelligent arguments. Armed with the facts and the knowledge surrounding tuition increases, the student voice will become an unstoppable force. Only then, will we find out where our tuition dollars are really going.

Questions? Comments?

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

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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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the iron warrior magazine

Created by...

Read by...

Written by...

YOU!

If you want to contribute ANYTHING AT ALL,

drop by our office (opposite the Orifice) or e-mail us at iwarrior@engmail



Dear LowRider: uw_LowRider@hotmail.com

“Unfortunately, no one can be told what the LowRider is. You have to read it for yourself.”

Dear LowRider,

I'm really scared about global warming! It's, like, a real problem that we have to deal with. Because you're so well known and respected, you should be leading the way and setting an example. Did you know that scientific research on ice samples from the polar ice caps dating back hundreds of years into the past has proven that the Earth has been getting warmer since the industrial revolution? It's our fault for all of the carbon dioxide we're put into the atmospheres. So, come on LowRider, inspire your readers to do good for the environment.

-Tree Hugging EnviroChem

Dear Tree Hugger,

My, my, my. Who let you into Engineering? Here comes the truth for all my loyal readers: Global warming is an illusion caused by the improved efficiency of genetically modified cotton and wool. The world is still the same temperature, it just seems warmer. Did you know that the average sweater produced in 2003 is over 200% warmer than one made in 1973? It has something to do with lobster genes in the cotton. Go talk to one of the Biotech profs and they'll tell you the same thing.

As for this “scientific” research you talk about, let me do some “engineeric” research for you. If the world were getting warmer, why is it that we have to drill through so much new ice to get to the old ice? Ice only forms when it's cold, so if it were getting warmer, no more ice could possibly be building up.

-LR

Dear LowRider,

Last term I was in Sarnia, and it was really boring and smelly. To keep myself amused, I bought a membership at an Internet pornography site with my credit card. I had to pay \$19.95 a month for the first four months (which was OK), but then there was fine print I didn't notice saying I had to pay \$200 a month thereafter for 20 years. So now I'm stuck paying more than I can afford, and my student slum doesn't even have an Internet connection! Do you have any legal advice on how to get out of this terrible contract?

-Victor

Dear Victor,

I've been to court a few times, so I have the legal system thingy figured out. Before I can help you, I'm going to need your username and password for the site to...uh...become more familiar with your

case. Just email them to me and I'll get back to you sooner or later.

-LR

Dear LowRider,

My girlfriend from first year just broke up with me. She's in Arts, so she's back in her hometown for the summer and she doesn't want to have a long-distance relationship. I've been drinking for the past four days straight, but I'm beginning to suspect that it's not making things better. What can I do to get her back, or to get a new girlfriend?

-Miserable Mechie

Dear Miserable,

Women truly are fascinating and difficult to understand. First, there are some fairly obvious questions that I should ask about the break up. Did you get fat? All that time sitting, doing homework and eating greasy village food will do a number on your figure. Did you stop showering and/or get smelly and dirty? In my experience, a lot of mechie's suffer from this problem. Nothing drives away the ladies like a foul stench.

If you answered a definite “no” to those questions, then you should think about whether or not you project the aura

of a true alpha male. It's sad to say it, but most guys in engineering just don't. If you are an alpha male, you will have fine ladies all over you. Get a car and soup it up like those fine looking Hondas in the University Plaza. Walk around all cocky and confident. First and foremost, get yourself a red bandana, and wear it all the time. Trust me.

-LR

Dear LowRider

You are a fake! I'm probably the only person who will write to you all semester. In fact, I don't even know if your email address is real or not. You seem funny enough, but I don't expect a reply.

-Skeptic

Dear Skeptic,

Time to eat your words, you faithless engi-nerd. Let it be known that “uw_LowRider@hotmail.com” is my genuine email address. So, loyal fans, keep those emails coming. As for you, Skeptic, you should walk around campus with your head hung in shame. You are truly a disgrace.

LowRider is real. The cases are real. The advice is final.

-LR

Cooking With Chow: How to Reheat Stuff

Chow Lin

3B Computer

Okay, you've just picked up a hot chick at the RF lab and invited her over for dinner at your place. If your house looks anything like my house, this is your first mistake. However, being the courageous person you are, you figured you would make dinner. Being the engineering student you are, you also figured you'd be “efficient” by reheating your dinner from the previous night.

The doorbell rings five minutes early—your reheated pasta is dry and short on sauce, your dinner rolls, fresh from the basement freezer, are soggy from the bad microwave job. What do you do? Go to Fast Freddie's, man, because it can't get much worse.

The result is, your date slaps you and calls you a ham-fisted pederast. Ouch. That really hurts. I mean, ham-fisted? Then, she might stay or leave, depending on how good the food is in the cafeteria that night. Either way, she's probably not going to want to help you move out this weekend—and that should always be your primary objective.

We've all been there, and you know what I'm talking about. Don't make the Newbie mistake of reheating food improperly! Otherwise your skillet will be as limp as your cooking skills and you'll be sore as hell carrying that couch down the street this weekend. Own the

pan, do not let the pan own you!

REHEATING BREAD

Now, our friend's first mistake was in his method of reheating bread. Let's call him “Ted”. No, wait, at Waterloo, it will probably be something like “Chow”. Okay, let's be (somewhat) politically correct and call him “TedChow”.

TedChow's first mistake was that he put frozen bread in the microwave. Actually, that's his second mistake. His first mistake was putting bread in the freezer in the first place. Why, for the love of <insert Diety here> did he put bread in the freezer? Because TedChow's a member of PriceCo, so

when he buys bread, he buys about a hundred loaves.

To avoid this catastrophe, buy small amounts of bread whenever you need it. Put your bread in the refrigerator, but never in the freezer. To avoid a large soggy mass of sog (aka Soggy McSog), only put your bread in the microwave for 20 to 40 seconds. If you put it in for too long, the water in the bread will evaporate and upon cooling (taking it out of the microwave) will quickly condense, soaking your bread.

ASIDE: Why this happens requires some understanding of how a microwave reheats your food. Microwave ovens project microwaves (radio waves in the 2.5 GHz range) at your food. These high energy waves then excite fat and water molecules in your food.

Incidentally, because microwaves are not absorbed by a multitude of materials including air, the air inside the microwave remains at room temperature; this is why a crispy crust cannot be formed (unlike an oven).

“Okay, I'll try to keep this in mind, but my bread is frozen, and I need to get it on the table!” If you ever find yourself in this predicament, don't fret, you can still get your bizzinatch gizzinatch on in no time. First, you need to separate the bread into usable slices. If the bread is presliced, this is not a problem: take a knife, and jam it between slices. Feel the bread; if it feels like it

may crumble, slice the bread with back-and-forth motions; if it feels solid, twist the knife to separate the slices. If the bread is not presliced, you will need a rugged serrated edge, such as a hacksaw, to slice the bread into manageable pieces.

Place the slices in the toaster. The heat will evaporate the water, the open space will allow it to escape, and the hot air will allow a thin brown caramelized layer to form on the bread. If you do not have a toaster, use a toaster oven, and failing that, use the top layer of your oven on broil; for these techniques, you will need to monitor your bread to make sure it does not burn, because a cloud of smoke coming out of your oven doesn't impress anyone.

REHEATING PASTA

TedChow's other mistake was the pasta. While reheating pasta may be efficient, it's not very impressive.

To start off with, let us outline the dangers that plague the microwave pasta chef. The microwave will vaporize water, drying your food. This could result in hard, dry portions of your pasta that the most hardcore of northern-Italians would break their teeth on. In addition, if your sauce is somewhat thin, or dry to begin with, this method does not help matters.

If you must microwave your pasta, put a thin layer of cheese on top of the pasta. Allow about five minutes for the cheese to melt. Not only is the melted cheese very tasty, but it creates a blanket on your pasta, allowing it to retain its moisture in the microwave; in addition, the oils from the cheeses help wet your pasta and keep it moist. Garnish with a sprig of parsley in the center of the dish.

If you have more than five minutes, you can reheat your pasta “properly”. Put some olive oil in a pan heated to medium heat. Throw your pasta in and move it around until the pasta is warm and has incorporated the oil. Once this is done, place the pasta in the center of a dish, being careful to preserve

a clean border framing your food. Grate some parmesan cheese onto the center of the pasta and throw in a sprig of parsley.

Remember, with a little bit of time and care, you too can own the reheat-monkey!

“Okay, you've just picked up a hot chick at the RF lab and invited her over for dinner at your place.”

“To avoid a large soggy mass of sog (aka Soggy McSog), only put your bread in the microwave for 20 to 40 seconds.”

“The heat will evaporate the water, ... and the hot air will allow a thin brown caramelized layer to form on the bread.”

“This could result in hard, dry portions of your pasta that the most hardcore of northern-Italians would break their teeth on.”

ENGINEERING SOCIETY EXECUTIVE REPORTS

A Word from the President

Leanne Whiteley



President

Over the last few weeks, I have been busy attending meetings including the Engineering Faculty Council (EFC) Meeting and the Engineering Safety Committee Meeting. At the EFC meeting, we heard from one of the new library staff, Mark Haslett. Mr. Haslett informed us that all the libraries should be completely wireless within the next month. Also, the Davis Library has group study rooms and quiet study rooms available to students. For more information, please visit the library website www.lib.uwaterloo.ca.

At the Health and Safety Committee meeting, we discussed problems pertaining to health and safety that had been reported by the Faculty. If you see something that looks unsafe or unhealthy, please report it. If you don't report it, the problem can't be fixed. You can report it to the Engineering Society Office, the Dean's office, or the campus Safety Office. Yes, there is such an office on campus and it's located in the Health Services Building. You can visit their web site www.safetyoffice.uwaterloo.ca for more information about the Occupational Health and Safety

Act (OHSA); the Workplace Hazardous Materials Information System (WHMIS); Policy 34, which is the University's Health, Safety, and Environment policy; and much more. It is everyone's responsibility to maintain a clean and safe work environment.

At this time, I would like to congratulate Jeff Henry, Angela MacLean, Jonathan Fishbein, and Joseph Fung for being elected as the new Engineering Student Societies' Council of Ontario (ESSCO) Executive. ESSCO is an umbrella organization for all the engineering student societies at universities in Ontario. Having all the exec being from one university is quite an accomplishment. We're proud of you!

Speaking of student societies, I would like to point out that the Engineering Society is probably the most well-organized student society on campus. This is due to the time and effort put in by the student volunteers that help run the Society, organize the services and plan the events. I would like to thank all the numerous directors and volunteers that help to make this Society what it is. Your time and effort truly does make a difference and is very much appreciated. Thank you!!

As always, if you any questions, concerns, or comments, please stop by the Office or contact me at asoc_prez@engmail.uwaterloo.ca or Ext. 4762. Good luck on your midterms!!



WEEF Announcements (are good!)

Mike Henheffer



WEEF Assistant Director

There are several WEEF related announcements and topics that I will be covering in this article. First of all, I would like to thank everyone who made a donation to WEEF this term. Your support is greatly appreciated and will help UW Engineering maintain its reputation as one of the best engineering schools in the world. Unfortunately, the class by class participation numbers will not be available for a month or so as we are having difficulty obtaining the enrollment numbers for each of the classes. We will make the participation statistics available to everyone as soon as we are able to compile them.

Proposals are currently being accepted for WEEF funding. WEEF has 35 000

dollars allocated towards funding this term. If there is something you feel WEEF should fund with this money, please make a proposal. Detailed information on what needs to be done to make a WEEF proposal can be found at <http://www.eng.uwaterloo.ca/~weef/proposals.html>. Proposals are being accepted until June 27th.

Last but not least, would you like to be more involved with WEEF? WEEF is currently looking for assistant directors. If you would like to help out with WEEF and get a feel for the day to day operation of WEEF, this would be a perfect opportunity for you.

As you may know, an election is coming up this term as well. So if you are interested in running for WEEF director, this would be a great way to get your foot in the door and gain some valuable experience. If you have been thinking about running, this would be a chance to determine whether or not you would enjoy being the director. If you are interested, feel free to stop by the WEEF office and talk to me or simply email weef@engmail.

Better Late Than Never

Ryan Walker



VP Internal

Middle Of Term (MOT) pub night in POETS is scheduled for June 20th. Come out and celebrate the term being half over. June 23 is B**5, the Big Bad Bowling and Beverage Bonanza! July 1st is Canada day and the engineers will once again be helping run a celebration for the local kids. Signup online to help with the celebration [http://engsoc.uwaterloo.ca/www/eng-](http://engsoc.uwaterloo.ca/www/engform.php)

[form.php](http://engform.php).

Engsoc exec nominations start June 20th. I would like to encourage anyone who has ever thought about becoming a member of the engsoc exec to come talk with any of the current exec to find out more about the positions. Holding an exec position is a great opportunity to network with admin, employers, and students from UW and other schools. It also helps develop interpersonal and management skills that are highly marketable in the workplace. Not to mention you get your own business cards, which is always a plus. I am enjoying my time as VP-I and would encourage any to run for an executive position.



Sandford Fleming Foundation
E2 3322, ext 4008, sff@engmail
www.eng.uwaterloo.ca/~sff

Debates

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

DATE July 7, 8, 9
TIME 11:30 – 1:00
PLACE E2 - 3324

Finals: Friday, July 11
Noon
E2-3324

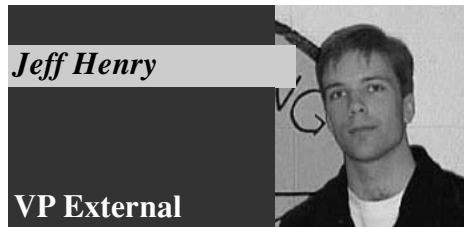
Refreshments will be served at the finals
Everyone is welcome

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

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

ENGINEERING SOCIETY EXECUTIVE REPORTS

Waterloo Takeover and Other Exciting Events



Jeff Henry

VP External

So we've all made it to the end of the first month. It seems that things are progressing quickly and by the time this issue makes it to print we'll all be saddled with the burden of midterms. But for those of you who enjoy looking beyond the gloom and helping out the surrounding community the Engineering Society will be providing many opportunities for you to do so.

Tentatively scheduled for the 20th, my charities directors have a special event

planned. The exec aren't sure exactly what they're doing but I do recall one day in the office when they came in, pointed, and laughed at us - needless to be say it should be interesting.

More traditionally my Canada Day directors will be using the month of June to encourage all of you to set aside a few hours on July 1st to help run this city's largest celebration of our nation's birthday. In case keeping the local children entertained with engineering Olympics isn't enough for you, volunteering earns you a free shirt and an invitation to the after party. Additionally, for every four-hour shift you will be fed with some wonderful Canada Day food. To sign up, visit <http://engsoc.uwaterloo.ca/www/> and follow the link. I hope to see all of you out to

help us run our part of the day and enjoy the evening's fireworks display.

Also planned is a "chick flick" night on June 24th in POETS and a special guest speaker from the PEO, Dr. Kodur, on June 26th who will speak on the World Trade Centre from an engineer's perspective.

Turning to the provincial side of the news, I mentioned the delegations Waterloo sent to the Engineering Student Societies' Council of Ontario's Annual General Meeting on May 23rd and that this report would have more substance. This time I am contented to inform you that the executive of that organization is now entirely composed of Waterloo Engineering Society 'A' members. As President of ESSCO, in the coming year my executive and I hope to bring visible

relevance and useful direction to the organization through valuable communication and education while building a voice for engineering students in this province. My VP Communications, Joseph Fung, and my VP Services and Development, Jon Fishbein, are dedicated to ensuring that this is indeed the case. Angela MacLean, my VP Finance, is further committed to locating and tracking all of the money we collect and use in this regard.

Finally I want to encourage any of you who find interacting with external organizations, attending conferences, and raising money for a good cause worthwhile and enjoyable to run for my position when exec nominations open on June 20th. The past 14 months really have been quite fulfilling and enjoyable.

Education Report Take 2



Laura Mooney

VP Education

Under duress of having to read Jon's work report, I present to you the second instalment of the epic known as ... "the VP Education Report" [insert menacing music here].

So what has happened in the past two weeks that's worth reporting? Well, the application round of co-op has finished and interviews begun. Many of you noticed that the last posting was, well, lacking - both in the quantity and quality of job offerings. What can you do about it? If you know people who could potentially employ students, it never hurts to mention that UW is full of eager, cheap, intelligent student labour. The more jobs come into the system, the better it is for us all. Do you have suggestions for how co-op can improve or questions about the way things are? Co-op Students Council meets before the Feds council every month. The next meeting is Sunday, June 8 at 10:30am in the Multipurpose room of the SLC. Everyone is welcome to attend - there are representatives from co-op administration who go as well, so your opinions will go straight to the people who can implement

changes to the system. If you can't attend or just want to pass ideas through other representatives, send your thoughts to myself or the CSC rep, Sonya Konzak (e-mail addresses are in the directors section of the EngSoc website).

Talking about co-op reminds me of money, which reminds me of books, and of course that reminds me of SUBS. A large number of books submitted to SUBS have now been transferred to the Feds Used Book Store. You can search online at <http://www.feds.ca/businesses/usedbookstore.html> to see if the text you've been holding out for is now there.

Now is the time to sign up for the Habitat for Humanity build during the first two weeks of July. Waivers need to be returned to the EngSoc office today (Friday, June 6), so get those forms in ASAP if you haven't done so already. If for some reason you can't get the form in by the deadline, e-mail me and arrangements can be made.

This weekend was the Alumni reunion for 5, 10, 15, 20 and 25 years. I had the pleasure of attending the dinner for the 20 and 25 year classes, and thus heard some very interesting tales of years gone by. If you're curious to find out an effective way of dealing with professors who write too fast, ask one of the exec how a trip to the machine shop and strike anywhere matches with a piece of chalk can liven up any lecture!

EngSoc Budget and Donations



Kristen Farn

VP Finance

We are already well into the term and the weather is almost perfect for enjoying some sun and some tasty barbeque grub. So, make sure to relax a bit before (a) midterms begin and (b) it's so hot that it takes all your expendable energy to get out of your backyard kiddie pool to get a fermented beverage.

Lots of EngSoc finances are being taken care of right now, however, most of my news will have to wait until the next Iron Warrior. The Spring 2003 budget was presented at the EngSoc meeting on May 28th and hopefully will have been amended as necessary and approved at the meeting on June 4th. A copy of the budget should be available on the society page of the EngSoc website and a copy will also be printed in the next IW issue. I will also post information on the website about what has been spent so far this term for each directorship.

EngSoc budgeted \$1500 to give to engineering student projects and initia-

tives this term. At the meeting on June 4th presentations should have been given by all groups that applied for funding and the council should have decided on how to allot the money. I should have cheques ready for the groups before the end of next week and I will include the results in my next IW report.

I hope everyone is having an amazing spring term. Also, make sure to check out the EngSoc calendar for the many events coming up this term.



Show off your curves with a UW engineering Baby Tee. Available only at the Novelties Store.

Upcoming Events from EngSoc

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
8	9	10	11	12	13	14	<i>EngSoc elections are happening this term! If you are interested in running for one of the many EngSoc executive positions, make sure you pay close attention to the nomination dates. Good luck to all candidates!</i>
						Engineering Convocation	
15	16	17	18	19	20	21	
					MOT Exec Nominations Period Begins		
22	23	24	25	26	27	28	
	A**5 Bowling Tournament	WIE Chick Flick Night	EngSoc Council Meeting #4	PEO Speaker Exec Nomination Period Ends	WEFF Proposals Due	Engineering Convocation	
29	30	1	2	3	4	5	
	University Holiday	Canada Day	Concrete Toboggan Dunk Tank Day			Frosh Leader Retreat	

Activities

EngSoc Election Information

Graeme Baer
Chief Returning Officer

Approximately 16 months ago, you elected Leanne Whiteley, Ryan Walker, Laura Mooney and Kristen Farn (and Jeff Henry, who was acclaimed) as your Engineering Society Executive and Marc Joly as WEEF Director. So now, two terms later, election time is rapidly approaching.

5 EngSoc exec positions are up for grabs (current academic term restrictions are in brackets if applicable):

President (2B)
VP Education (2A)
VP External (2A)
VP Finance
VP Internal

All positions are for 16 months (2 work terms and 2 academic terms).

The Importance of Women's and Men's Roles Together in Engineering

Amy Gill
WIE Initiatives Developer

On Wednesday, May 21, women and men from different engineering disciplines here at UW gathered in the DC Fishbowl to discuss the importance of each others' roles in the engineering field. The evening began with complimentary pizza and sweets, as well as refreshments to help wash down the tasty treats. After a brief mingling session while enjoying our dinner, we settled into our seats for what proved to be a very interesting evening of discussion and opinion sharing.

The evening began with Professor Susan Tighe, from the Civil Engineering department, leading the discussion on why it is important for men in engineering to understand women's roles in engineering. She highlighted the importance and difficulty of making life decisions based on two professional careers and how this is a new issue that faces many of today's young engineers, male and female alike. This issue requires compromise and understanding from both parties and respect for each others' careers. She also impressed the importance of remaining true and respectful to oneself. In doing your job well and always putting the best foot forward, people will become respectful and trusting towards your work.

Semiformal: It's Going to be Something

Matthew Harper
2B Computer

Well, I will start off by telling you what I *do* know about this term's Semi-Formal. It will be happening on Saturday, July 5th. This happens to be the same day as the Frosh Leader Summer Retreat, so all of you with Semi tickets will have Get-Out-Of-Jail free passes, should the retreat run long. Even better, for those of you who are in town specifically for the retreat, now you know what you'll be doing that night.

I can also say that the theme for Semi-

Anyone who has paid and not refunded their \$14 EngSoc fee is eligible to run or nominate someone.

The position of WEEF Director is also up for election but is simply restricted to current engineering students.

Nominations open in two weeks, June 20th, and run until Thursday, June 26th. Forms will be available in the Orifice or online (<http://engsoc.uwaterloo.ca>), and need to be returned signed to the CRO mailbox in the Orifice.

The election is scheduled for Wednesday, July 9, but we'll have more about that in the next issue.

So, if you're interested in helping to shape the direction of Engineering Society for the next 16 months, fill out a nomination form and drop it off!

If you have any questions, feel free to drop me an email at asoc_cro@engmail.uwaterloo.ca

Much discussion about the possible causes for the low numbers of women in the field and the experiences that have occurred with sexism were shared. Views were aired about the separation that occurs at childhood and as future parents how it is important to be aware of this and try and overcome it.

The importance of being good role models for the upcoming generations was also discussed from both views. For women providing female role models but also for men respecting their female colleagues and helping to expose them to society in hopes of helping to increase the numbers of female engineers.

Throughout the evening it was very apparent that the issues surrounding the growth and diversification of engineering are not a foreign thought to most engineers or future engineers. Awareness is increasing in both genders and with time and support from committees within the profession, it is not unreasonable to expect the gap between the numbers of men and women to close. Both sides provide very interesting and important views and can point out different opinions or issues that may not have previously been considered. It is important to have everyone working together to help create the best possible environment for the engineers of tomorrow and make our futures the brightest that they can be.

formal will be a Hawaiian Luau. I'm really hoping that me and my co-director Larissa Klypycz will be able to get every attendee of Semi-formal laid before the end of the night.

What we do not yet know at this point is the location, menu, ticket price, or the DJ for the Semi. However, we are working very hard to find out and we will let you know as soon as possible. So, keep an eye out on engsoc_a_general, or for posters around engineering. We will be selling tickets soon and we really want your support. They all said a man couldn't run Semi. Prove them wrong. Prove the naysayers wrong.

GradComm Update

Kristina Hotz

GradComm 2004
Co-Chair



Hey 2004s, is your pinky finger getting itchy yet? If yes, then be sure to subscribe to gradcomm2004-subscribe@yahoo.com. This is an announcement list that will keep you up-to-date on upcoming events and deadlines. Most of you already should have had your picture taken by now. If not, you still have one week left, but don't delay. If your picture isn't taken by the end of next week your picture won't show up in the composite. It would be as though you were never at this school and that would be sad.

The most pressing due dates this term are for the yearbook. If you haven't seen one of these massive books stop in at the Orifice and ask to see the one from 2002. "Yearbook" doesn't mean the same thing as it did in high school. These books are for our graduating year, meaning its pages

follow us from our first year to our final year. If you're super gung-ho and want to send in class photos for the yearbook send them to engbooka@engmail.uwaterloo.ca — just make sure they're high resolution (300 dpi or more) and are JPEGs or TIFFs.

DEADLINES

*All graduating students will need to choose a grad photo, and a candid photo to go in the yearbook BEFORE July 25th. If you don't want to be in the yearbook tell your yearbook rep BEFORE July 25th.

*Blurbs are 250 words (text format e-mailed to engbooka@engmail is preferred). Also try and avoid being derogatory to others/profs/etc.

*Images - if you can, please scan them in at high resolution (300 dpi or more) and send them to engbooka@engmail

If you have any yearbook questions, don't hesitate to email engbooka@engmail. If you're interested in general yearbook discussion and planning subscribe to the discussion group at engbook2004-subscribe@yahoo.com.

Canadian Society of Civil Engineers

Dan Foong

4A Civil



I have always wondered what lay beyond the walls of the University. I've often drifted in and out of lectures wondering where I would be after getting my Iron Ring and Degree. Thus far, I haven't really looked into any of the possibilities that I've dreamt of.

I've looked into the PEO Student Membership Program (SMP), but haven't found it to be all that useful for me, or other Civil Engineering students for that matter. There isn't much in terms of useful contacts, or any other useful information being offered through the PEO SMP.

Similar to the IEEE, the Canadian Society for Civil Engineering (CSCE) Student Chapter at Waterloo will help create more useful contacts between the Professionals in the field of Civil Engineering and the students currently enrolled in the Civil Engineering program. Although not currently established, I am currently working on creating one.

A Brief History of the CSCE:

The CSCE was established well over a hundred years ago in 1887. The basic idea behind its creation was to make a forum where Civil Engineers could share their knowledge and encourage investigation

within the profession.

In 1918, it began to incorporate all fields of engineering, and eventually became the Engineering Institute of Canada. However, in 1972 the CSCE was re-established with the basic principles that created the 1887 society.

Since its re-establishment, the CSCE has become the only Canadian organization that helps to bring together Civil Engineers from all areas of Civil Engineering. It is also responsible for the development and promotion of the profession.

The CSCE provides many of the same opportunities as the PEO student membership program, only it's geared more towards Civil Engineering. There are numerous Scholarship opportunities, as well as chances to meet with potential employees. However, unlike the PEO, the CSCE is nationwide, as opposed to Ontario centered. This allows for liaising with people in the profession from all across Canada.

Also, unlike the PEO, students run the chapter. It's the students who decide what to do: conferences, field trips, and competitions (bridge building and otherwise) are all possibilities.

Membership is only \$5 for an entire year, and you get a subscription to the CSCE's Magazine, The Canadian Civil Engineer.

I am currently looking for Civil Engineering Students interested in pursuing this as an initiative.



Alternative Fuels Team Shines at the 2003 Tour De Sol

Eric Duiker
UWAFT Team Leader

Another annual competition is in the books for the U of W Alternative Fuels Team (UWAFT). For the first time in history, two UWAFT vehicles were entered head to head in the same competition. The 2003 Tour De Sol, which began in Burlington N.J. and finished in Washington D.C., awarded points for acceleration, range, autocross performance, lowest greenhouse gas emissions, fuel economy and vehicle quality/practicality. The newly designed drivetrain in team's maple leaf decorated, ethanol burning Chevy Malibu (aka Eskimobile) took 4th place overall, while grabbing the award for best range and reliability. The

car drove over 600 trouble-free miles while achieving 46 miles per gallon. Although the team's 1999 LPG and E85 powered Chevy Silverado was the heaviest vehicle of the event, Al C. O'holic made quick work of the 1/8 mile, taking first place by over 1 second. Perhaps the most exciting part of the entire event was the compliments received for the "truly Canadian" appearance of the Eskimobile. Despite the team's hesitance to take the car into such a patriotic country, we soon realized that our neighbors to the south have a great respect for us, even if many of them can be easily convinced (by team member Derek Robb) that we live in igloos in the Northwest Territories and snowshoe to school. For more information about UWAFT, check us out at www.eng.uwaterloo.ca/~uw_aft.



The UWAFT Chevy Malibu a.k.a. The Eskimobile

Season Comes To An End For The 2003 Formula SAE Team

Peter Yang
Formula SAE Team

During the 23rd annual Formula Society of Automotive Engineers (FSAE) Competition in Pontiac, Michigan, 30 engineering students and alumni represented the University of Waterloo with their F03 race car. The main feature that set the F03 car apart from its predecessors is the fact that it is dynamically the best car Waterloo has ever produced in the Team's 18-year history. The car finished 2nd in acceleration and 4th in skid-pad - Waterloo's best finish ever at these events. All teams and spectators at the competition were eager to find out if Waterloo would claim the throne as this year's champion.

Unfortunately, luck was not on the Team's side. The Team placed 27th overall in the 125-team competition. This lower-than-normal finish for Waterloo was due to a cooling hose clamp failure that occurred during the 3rd of 22 laps in the Endurance/Fuel Economy events. Before the failure, the car actually recorded one of the fastest lap times on the track. Of the 90 cars that attempted the challenging

event, where no repairs were allowed, only 34 cars finished. Posting 'Did-Not-Finish' (DNF) in the two events, which accounted for a combined total of 40% of points available at the competition, hurt Waterloo's final overall standing. Nevertheless, the Team received a very respectable 447.622 out of 600 points from the 6 other events that it successfully completed.

Winning awards at the competition has always been a Waterloo tradition, and this year was not an exception. In fact, the Team won the prestigious Ricardo Powertrain Award - presented to the Team for "outstanding utilization of Powertrain Development tools and strategies to improve overall vehicle performance." In addition, the Team won 2nd place in the SolidWorks Fastest Time to Market Acceleration Award. In total, the Team brought home \$1250 US in award money and 20 licenses of SolidWorks 3D CAD software for the University.

The 2003 Team also accomplished what previous UW FSAE teams have strived to do: building and racing a well-designed and engineered race car that is both statically and dynamically world-class. Waterloo maintains its engineering superiority over all other Canadian university teams by placing 5th overall in the Engineering Design event, the highest Canadian finish this year.

Waterloo's placement in the static and dynamics events were:

- 1st in Powertrain engineering and development
- 2nd in Acceleration
- 4th in Skid-Pad
- 5th (tie) in Engineering Design
- 19th in Marketing Presentation
- 37th in Autocross
- 49th in Cost Event
- DNF in Endurance
- DNF in Fuel Economy

The 2003 Team would like to thank all team members and alumni that contributed to its success this past year. Also, the Team would like to thank its sponsors, friends, and family for their generous and continuing support throughout the year.

"The main feature that set the F03 car apart from its predecessors is the fact that it is dynamically the best car Waterloo has ever produced in the Team's 18-year history."

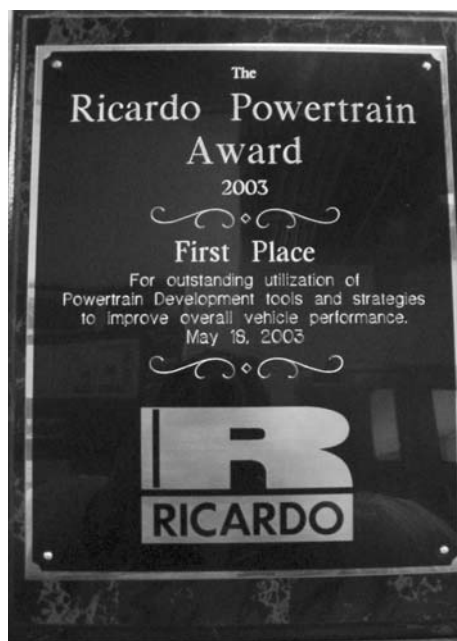
"...the Team won the prestigious Ricardo Powertrain Award..."



The Formula SAE Team



The Formula SAE Car



The Ricardo Powertrain Award



Judging for the Ricardo Powertrain Award

**FEDS BREAK
LITTLE KNOWN
CANADIAN LAW!!
THEY'RE HAVING A BBQ
WITHOUT BEER.**

The Bomber BBQ

Starting June 4th
Open Wed- Fri
11:30-2:00
weather permitting
Entrance through patio

FEDS
FEDERATION OF STUDENTS
UNIVERSITY OF WATERLOO

Community

Engineers Without Borders: A Volunteer's Story

Avi Caplan

EWB Volunteer
Uganda

The Northern part of Uganda - a country of 25 million bordering on Sudan, Democratic Republic of the Congo, Rwanda, Tanzania, and Kenya - has suffered for the past 15 years from what is referred to as "insecurity." Attacks and ambushes on civilians by the Lord's Resistance Army, a quasi-religious guerrilla force, disrupt agriculture and education. Women and children are abducted for use as human shields, to be taken as wives, or to be trained as soldiers.

This summer, I'm working in Uganda as an Engineers Without Borders volunteer with Canadian Physicians for Aid and Relief (CPAR) on a project intended to increase the productive capacity of war-affected women and youth through the use of ICTs - information and communication technologies - and also to help build the ICT capacity of CPAR-Uganda as an organization. Since arriving mid-April I've had quite a variety of new experiences.

Immediately upon arrival in Africa it became clear that technology is used in a bit of a different way here. When boarding a small plane in Nairobi for the last leg of my journey, I was asked to step through a

metal detector, but was not allowed to hand off my keys and wallet. It seems that the metal detector goes off for everyone, and then security frisks you if you look as if you might be a threat. In Toronto, by contrast, the roll of duct tape in my bag was cause for significant concern and was confiscated. I'm told, will be destroyed. I don't get it.

It also became clear in my first few days at and around the CPAR head office in Kampala, the capital of Uganda, that daily life here is quite different than what I'm used to.

On the roads, for example, size rules the day. Vehicles don't slow down as they approach pedestrians, bicycles, or animals. Liberal use of the horn encourages smaller things to move or be moved. There's no such thing as a traffic bridge, and I can recall having seen only one set of traffic lights, but they weren't working. In order to get anywhere you just nose your way into a swarm of vehicles to open up a space to turn or to cross.

In driving to check on a vehicle being worked on by a "mechanic" (apparently there's no such formal training here), the logistics officer and I ended up in one of the poorer areas of town, where roads are just rocky, hilly paths. Two young children (four or five years old, I was told afterwards) were, with grim determination, carrying jerry cans of water at least the size of their torsos up the hill as we were trying to turn around on a hill.

Somehow they ended up behind us as we were making the turn, and the small girl panicked, put down her water, and ran away crying. Problems are very different here. (Our driver stopped, got out, picked up the jerry can, and brought it to her.)

Up North in Lira, where the ICT learning centre is being established, what has struck me most - besides the impossibility of reliable power, telephone, and Internet connections - is the poverty. Respectably-dressed co-workers go home at night to huts or houses in disrepair, without running water or electricity, and where food is cooked outside on a wood fire. Children and animals are obviously malnourished. One can only be sure of the availability in the way of food of some form of starch and some variety of meat, plus whatever local produce happens to be in season. Even a visitor with money is hardly assured of finding much of a selection. Not to say that such poverty doesn't exist in Kampala - far from it - but it's even more noticeable up country.

One of the most exciting things I've seen so far in Lira is the work of the director of Radio Lira, a local FM station. White people such as him and myself, I should note, are very uncommon up country, and are followed with all eyes or called out to on the street for attention. He decided three years ago to stop talking about development and actually do something.

He shopped around for an old radio transmitter, hitchhiked to California to

take it down off a tower, then came here to set up a radio station that plays not only music, but also offers educational programming on subjects such as basic agricultural economics.

He also helped to set up a service whereby cell phones have been provided to each of the public markets in Uganda. There, they are used to report back regularly by text message the prices of major crops. This information is then published, announced over the radio, and made available at the cost of a single text message from any cell phone. The result is that farmers are now able to sell their goods where the demand is highest, whereas before they might have only gotten 50-70% of fair value due to a lack of information. He's using simple technology to make the market mechanism work.

As I settle into the routine in Lira, I'll be helping CPAR look at how this sort of information and communication technology can be used to help improve people's lives. There's no question that there's much work to be done here, but also that there are many locals who are working hard to lift themselves, along with their fellow Ugandans, out of poverty.

I welcome e-mail during my stay here (avicaplan@ewb.ca), and am maintaining a mailing list to which I would be happy to add anyone interested.

Visit <http://waterloo.ewb.ca> to find out more about the Waterloo chapter of Engineers Without Borders.



Scaffolding on a 5-story building in Kampala, Uganda.



Construction on a Ugandan building



A typical Ugandan dwelling



A Ugandan village

Life...or Nothing like it - Decisions, Decisions

Rajat Suri

1B Chemical



If it ain't microwavable, don't bother - Rajat Suri

So there I was, standing in my kitchen in MKV at 4 o'clock in the morning, almost too tired to breathe. It had been a rough night. Thursdays normally are, with all those assignments due the next day, and not to mention that mind-numbingly boring lab report. But this one had been especially taxing. You see... I hadn't eaten dinner yet.

You laugh. You jeer. You mock. You deny. How, you ask, can Rajat Suri possibly miss the daily miracle also known as supper? Rajat could skip breakfast in the blink of an eye, miss lunch without complaining too much, but dinner? Say it ain't so...

It was so. With all that work, dinner had completely escaped my mind and now my stomach was making noises not too different from the mating call of the Canadian moose. Sleep was out of the question in my state - unless I wanted dreams of being attacked by a group of identical hot dogs with sunglasses and black trench coats, laying the karate chops on me, Matrix-style. Its happened before... except last time the hot dogs had chain-mail, long-swords and were screaming "Gondor!" as they swooped towards me in slow motion on their warhorses. Movies and hunger do not go well together.

Food is scarce at 4:30 in the morning. For some strange reason, Village 1 dinner stops at 7 pm and the actual cafeteria closes at 11 pm. I mean come on... you'd think we were living in an old folks nursing home instead of a university residence with those kind of timings. I don't even get home from class before 7 pm, let alone eat dinner then.

Ahh, you say triumphantly, but you have a kitchen right? Surely you can whip yourself up a burger or something? It can't be THAT hard...

Ok ok, so you've got me there. I'm a lazy bum. On the Formula Sheet of Life (a topic coming in the near future), it specifically mentions Rajat + Cooking - Sleep - Food = Fire Alarm * (Lots of Pissed Residents). I follow this formula religiously (yes, even the units) and it has worked wonders for me, in terms of increasing my bond with that wonderful invention I like to call Mick. You haven't lived till you've had microwaved fish. No, really...

"Rajat could skip breakfast in the blink of an eye, miss lunch without complaining too much, but dinner? Say it ain't so..."

But I digress. That fateful day, I had met my match. There was nothing left to microwave in the fridge or the freezer... well nothing remotely before its expiry date anyways. For the first time, Mick had been rendered absolutely useless. I could almost hear him crying.

Things were looking grim, and frankly, I was getting desperate. So desperate that I reached for the fruit bowl.

At this point some history on the fruit

bowl is required. Now some four weeks ago, my mom put together a medley of different fruits into a nice big blue basket and presented it to me, after extracting promises that I would eat well in university. I applied the art of nodding and smiling skillfully that day, and came away with quite a collection of microwavable delights... and a basket of fruit that would ruminate on top of my fridge for the next month, utterly ignored. Until that day.

The fruit might have been rotten or ripe - I really can't tell either way. And so I stared forlornly into the fruit bowl, feeling more than a little sorry for myself. Fruit for dinner. I could feel my taste buds crying already.

But if I thought things couldn't get worse, I had another thing coming. A thing that would haunt me relentlessly for days on end and infest every nook and cranny of my mind, my life... and maybe even my soul. (My soul is easily infested. Just ask whoever created Super Mario 3 for Nintendo. Great game, yes... but oh so addictive!)

There were two types of fruits in the basket. Two very different types, both good in their own way, but different nevertheless. And I had to make a decision between them.

Apples and oranges. The old cliché about never comparing the two always seemed to make sense to me, but evidently whoever thought that one up was never in my situation. I had to choose between them, and I

had to do it soon. It couldn't be that hard right? Hey if Britney Spears is a virgin, surely anything is possible!

Apples... crunchy and juicy. Take it out, wash it and start munching away. So easy...so convenient. I put out an eager hand for the nearest red apple...

But then I saw the orange. Big and impossibly bright, it looked terribly inviting. I knew what was underneath that protective skin. Juice, juice and more sweet, sweet juice. I was drooling already. Which to choose?

My brain coughed and sputtered like an old Dodge Viper. I reeled back, overcome by the enormity of the choice I was faced with. How could one choose between apples and oranges objectively? It's like trying to choose between Coke and Pepsi... they are so similar but at the same time so different.

Decisions like these have probably been agonized over since the very beginning of time. I can just imagine Eve in Garden of Eden deciding whether to bite the Apple of Lust or peel the Orange of Chastity. Or how about Snow White wondering if the old crone had anything else beside those apples in her basket. Maybe if

Sir Isaac Newton sat below an orange tree, he would have discovered the Theory of Relativity instead of plain old gravity. Hey it's possible!

There was simply no way I was about to make such a decision on the spur of the moment. So I just microwaved some leftover salad and called it a day.

But next time you see an apple and orange laying side by side in a fruit bowl, just go for the closest one. As I've learned first-hand in the University of Waterloo, it just doesn't pay to think.

"How could one choose between apples and oranges objectively? It's like trying to choose between Coke and Pepsi..."

the Iron Inquisition

Jason Griese, 4A Computer

"When is 'I was drunk' an acceptable answer?"



"Thursdays and Fridays after 12:00 pm." Brad Woodward - 2B Mech



"When you wake up with a Dirty Sanchez." Chris Deck - 4A Comp



"When you wake up married to your TA." Dan Sellan - 1B Chem



"When I failed GenE 121." Ian Miller - 4A Civil



"Drunk? Who's drunk?" Mark Artymko - 4A Elec



"When I lost my dog." Paul Habsch - 4A Comp



"When you bowl a 63 as a Scunt God." Steve Dufor & Steve Lill - 98 Elec Grads



"Wednesday at Mongolian." Robin Wilson & Illan Kramer - 4A Elec

POINT VS. COUNTERPOINT

Students Have too Little Control Over Non-Academic Aspects of University Life



Jeff Henry

4A Computer

Especially with the calibre of individuals accepted into the University of Waterloo, the students here recognize the importance of solid academics unfettered by complaints over difficulty level and time commitments. After all, the weight of the degree in industry is the reason that almost all of us chose this institution over all others. By no means, however, does that sentiment imply that the undergraduate community is so narrowly focused that non-academic university life is not important.

Over the past few years the university administration have pulled a remarkable double-cross on their incoming student population. At Student Life 101 the incoming students are told, straight-faced and with their parents present, their parents role in their lives is over with. The university says they will treat each student like the adult they are. Should parents call and ask how their offspring are faring the university will simply turn them away. It is up to the students now to disclose that information as they see fit, to deal with their own problems, and to suffer the consequences of their decisions by themselves. However, the administration's student life coordinator will tell you equally straight-faced about the fiduciary duty the university has taken on for the students on behalf of their parents.

That the administration treats students as children incapable of making their own decisions can be seen in any number of incidents from the way they deal with their representatives in student government through to frosh week. I apologize - that should have read "orientation week" for "first year students" as the last thing we would want to do is make parents think we were going to haze their precious double cohort child by calling him or her a "frosh".

In dealing with student government the administration often refuses to engage the students in decisions involving their non-academic life leveraging the lack of corporate memory in student organizations. The reallocating of SuperBuild funds to ensure that despite \$4.1-million donation students

will still pay \$4.35-million over 25 years for the new CECS building is but one example. That such a move was done three months after telling students donations will reduce their contributions back in 2001 says even more as no student recognized this until just recently.

Students are viewed as not being able to responsibly run their own pubs without being on the leash of university operators while at the same time the university blatantly disregards decades-old grievance procedures set out in binding contract with student government. Unilaterally evicting students from a floor of village residence to make room for grad student offices two years ago doesn't make the track record look any cleaner either.

A wine and cheese for women in engineering clearly is an even that focuses on drinking and how dare we even think that an international beer appreciation night can be cultural as it is clearly about getting so drunk we have to crawl home. After all, cubs aren't even allowed to prawl anymore, let alone visit public establishments.

An administration that views itself as having a fiduciary duty must ensure that the child-like student population focuses on academics while putting up the blinders to university life. That, after all, is what their ever-important yet hands-off parents would want. Students in that context obviously do not have the ability to be responsible for their own lives. Overall, our level of control over university life outside of the classroom reflects that belief.

I prefer, however, to believe in the message I heard at my own Student Life 101. Over the five years I spend here I believe more and more that I can and should be responsible for my own decisions and should face the consequences those decisions generate. I should be able to tour local establishments, gain cultural understanding through social beverage-enabled interactions, and listening to a local band in a student-run public establishment. And contrary to the seemingly popular belief, I can sing the engineering hymn without actually demolishing a ridiculous number of beers.

University is about learning and about choices. The time we all spend here is supposed to shape us as individuals through experience and knowledge. Academic knowledge not tempered by real-life experiences is no knowledge at all. And for any of that to mean anything we simply must be more involved with our own decisions.



Maria Simoes

4A Computer

As in any well established relationship, there are a set of responsibilities and a set of rights that must be adhered to. The Canadian Charter of Rights and Freedoms documents the liberty of its citizens. However, the average citizen is expected to exercise certain responsibilities or duties, such as voting for the people they feel best represent the country, acting in a responsible manner in terms of drink and vice, and not committing documented criminal acts. In turn, the Canadian government will exercise a level of authority to represent and uphold the rights of all citizens. This country's federal government is built upon a "give and take" principle, with each participant both needing to give and take.

Looking at the surface of the question, the average student would probably answer yes, students have too little control. However, there is a tendency to look only at the negative, especially in a culture such as ours that likes to hash and rehash anything we dislike or disapprove of. Looking more closely at student authority, one can see an intricate hierarchal relationship between the administration and the student body.

The university administration deals with each of the faculty administrations. In turn, the faculty administrations deal with departmental administrations. Looking at the "bottom" of the hierarchy, students interact with a representative body (in this faculty, the body would be EngSoc). EngSoc in turn interacts with the faculty and departmental administrations. In the end, students have a modicum or acceptable level of control. The Engineering Society, in reporting and discussing issues with the administration exercises that control on a daily basis.

In a manner similar to how the citizen body is responsible for electing its leadership, we, the students, are responsible for electing ours. Our student lives are not unilaterally run by administration; rather, in a manner similar to the Canadian government, a "give and take" relationship is utilized.

Furthermore, there are many aspects of

student life that are primarily student run. Numerous committees and representative authorities are all run by students. Yes, the students do need to report to the "higher authority"; however, that is usually the case in such situations.

Now, some might document recent incidences when there has been an apparent revoking of student rights. Issues such as renaming Frosh Week into Orientation Week, the ban on referencing alcoholic beverages and alcohol establishments on posters, and administration revoking of student run public establishment licenses are just a few to be named. Yes, we have lost some freedoms and some control; however, if one things about it, one might be able to find plausible and legitimate reasons. The renaming of Frosh Week into Orientation Week maintains the professional and respectable aspect of the week and gives the indication that the week is no longer one big long drinking fest.

The ban on advertising events wherein alcoholic beverages will be imbued is also somewhat reasonable. The act parallels that of the federal government wherein a ban was placed on cigarette and hard liquor advertisements. The administration has not put a ban on the frequenting of pubs, or the attending of events wherein alcohol will be served; rather, they have just put a ban on the advertisement of such events in public places to maintain the professional reputation of the institution.

Lastly, the university revoked the Federation of Students' authority over their public establishments after certain issues pertaining to student security and university interests were brought to light. If anything were to happen at such establishments, it would be the administration, not the students, who would come under fire.

In the end, we, the students do have control both over our academic and non-academic lives at this university. We are treated, not as children, but as citizens of this university - with respective rights and responsibilities. In the end, we as a body need to be responsible of our actions and thankful of our freedoms.

Editor's Note: Point vs. Counterpoint is intended as a forum for objective and thought provoking debate on various issues. The views and opinions expressed here do not necessarily reflect those of the author(s), the Iron Warrior, or the Engineering Society.

The Ontario Driveclean Program



Matt Gagliardi
4A Mechanical

Ontario's driveclean program is essential to guarantee the future of the air that we breathe. Or that is what the government wishes you to believe. In reality it is ineffectual, costly, and prone to abuse.

The driveclean program began in Ontario first in the GTA. Citing the high levels of smog in the city, it was deemed necessary for all passenger vehicles to be inspected to get the "heavy polluters" off the road. Now, years later, the smog level in Toronto has risen, in spite of the expensive efforts of driveclean. The program

only targeted passenger vehicles between the ages of 2 years and 20 in age. Commercial and heavy industry vehicles are subject to different, more lenient regulations.

But what does it all cost? To become a driveclean certified testing facility, you must purchase a very specific piece of testing equipment. Only one machine is approved by the government, allowing its maker a complete monopoly. This machine costs upwards of \$70,000 to install. Obviously, all but the largest garages cannot afford this equipment. It seems like another nod to the government's corporate sponsors. Beyond the cost of the mandated machine, a garage is

allowed to charge an individual no more than \$35 for the initial test and if failed, no more than \$17.50 for two additional retests. Each test can take from 15 to 30 minutes depending on the vehicle. Out of this \$35 each test, \$10 goes directly to the government as an "administration fee". So from the perspective of a garage, you have a \$70,000 initial investment which you can gross only \$25 for every vehicle, which at best you can only manage 2 an hour, counting turnover time. Once the cost of labor is factored in, a shop is looking at a return on investment of decades. Likely the machine will become obsolete before they see any profit. So why does any business begin testing when there is no money

to be made?

The driveclean emissions test is not simply a matter of measuring what comes out of the tailpipe. The final word on whether a vehicle passes the test is up to the discretion of the inspector. Furthermore, the inspector must first deem the car safe to even be placed on the machine. If they see anything that they don't like, the vehicle is denied testing, and immediately fails. Conveniently, most testing facilities are also repair facilities. Thus, the inspector can give you a quote of

Continued on page 11. See Driveclean.

Driveclean

...continued from Page 10.

how much it will cost to repair and pass the test. There are anecdotal stories of people being asked to pay thousands of dollars of repairs to even get their car on the testing machine. Then when it is taken to another shop, the car passes with no problems.

Now, what type of problems can an inspector deem unsafe without repair. A lot of people like to modify their cars with basic upgrades; cold air intakes, free flowing exhaust, new air filters, etc. If the inspector feels malevolent, they can demand that all modifications be removed and the car returned to factory condition before they will even all the test. This has no bearing on the pollution that comes out of the tailpipe. Recently when I had my car tested, a gentleman in front of me was told that his car failed because the inspector "thought he heard an exhaust leak". If the leak existed, it should be fixed before being allowed back on the road. But to ask another \$100 to determine conclusively if the leak even existed is outrageous. The car was failed on a whim, on speculation of a problem that may not even exist.

Since my car has been tested recently I have some number here. My emissions were 6 ppm out of a possible 98 ppm hydrocarbons, .01% out of .55% CO, and 36 ppm out of 771 ppm NO. My smallest safety factor was a little over 16. Now this says to me that if I was to scale my engine up to the maximum emissions levels I could have a 64 cylinder engine and still pass! This is absurd, yet they want me to get tested every two years in the name of pollution. I feel that I am not getting my fair share of emissions. I am allowed significantly more, and am paying for the privilege of knowing this, so I think I will try to use my margin. Maybe I will cut the catalytic convert and off my car, but that won't get me high enough. Maybe if I start putting a quart of engine oil in my gas tank with every fill I can begin to meet my emission allowances. Run my car like a two stroke, without any smog gear and get tested again. Sadly I think I could still pass, 60 cylinders is a lot to make up.

Now next time you vote, remember what government wishes to make emissions testing more costly for the average person, while at the same time relaxing corporate and manufacturing pollution quotas. It is acceptable to have the factory down the street dumping tons of pollution into the atmosphere every year because they gave campaign donations, the silly taxpayer only voted.



Wacky Waterloo Weather



André Beltempo

2B Mechanical

I have now been in Waterloo for 3 and one half semesters, and of all the places I've been, I will say one thing about Waterloo: The weather is absolutely, without a doubt, the most ridiculous, unpredictable and downright most awful weather I've ever seen in my entire life. And I've even lived in England for 3 years!

To this day, I have not ridden my bicycle since 1A. You see, I lived in CLT, and thought I'd need a bike to get from there to Engineering. When it rained on the third day of school, I dismissed it, and carried on. As the semester wore on, I became less convinced that there was some kind of bizarre meteorological anomaly, and more convinced that the weather here was indeed this bad all the time. After tallying it up, it rained consistently every second day from September until exams in December. In December, mercifully, the rain stopped, only to be replaced with snow, freezing rain, and some kind of hail that defied classification. To this day I bear emotional scars of riding my bike through a perpetual car wash, against the wind and

forever uphill. Incidentally, check out the bikes here, and I challenge you to find a serious bike rider without a fender. I biked for 15 years before I came here, and I NEVER needed a fender to deflect the amount of precipitation we receive here.

Needless to say, the bike now sits unused in the garage, never again to be used. I'd rather walk through the perpetual downpour presented by this city than get water up my ass again. I mean, on Tuesday (May 27th) it was foggy in the morning, then brightened up and looked beautiful, then there was a downpour, then it was sunny, then another downpour, and this continued for the rest of the day. Say what you want, but that's bizarre. The kicker is that I didn't even think it was out of the ordinary anymore, and now bring my rain jacket to school no matter what the hell the weather looks like.

I feel like that guy in Hitchhikers Guide To the Galaxy, who had classified every possible type of rain in the world. Before coming here, I'd never seen the peculiar mist-rain that we get here. You know the stuff I'm talking about. It's the stuff that doesn't look like rain, and doesn't really feel like rain, but still manages to get you wet somehow. Then there's the fact that when it's NOT raining, it's usually, cloudy, cold, and windy. Whoever named Chicago the windy city had never visited Waterloo. Sometimes we are even blessed by both wind and rain at the same time (happens at

least once a week) and that's when it's really fun to watch the people with umbrellas. In the frosh kit, they should hand out a complementary windbreaker and umbrella, instead of the sunscreen I got. Maybe that was a gag gift, or something. . .

I sincerely hope that KW natives don't think the weather in the rest of the country is like this, because I've lived in Ottawa, Montreal and Trenton, and believe me folks, there is hope. You can leave here at any time, and encounter benign weather, sun, and live in harmony with nature and your fellow man.

Before someone gets their knickers in a twist about how I'm embellishing the viciousness of Waterloo weather, I issue this challenge to the City of Waterloo: I ask for 7 (Seven) consecutive days of NO rain, NO wind, NO little fog in the morning, NO dark clouds, NOTHING, just SUN and a cool breeze. I've seen that at least three times a summer almost everywhere I lived, yes, even in jolly old England. If Waterloo delivers, then I will not only consider, but actually print a retraction.

The real irony of the whole situation is that my last name, Beltempo, means good weather, and up until I came here, I thought it was well deserved. . .but alas, I have been thoroughly and utterly defeated by the absolutely atrociously abysmal meteorological conditions of this town.

Ridiculous Recycling



André Beltempo

2B Mechanical

From a very young age, our generation was bombarded with the three R's, environmental tidbits and pretty much by age 10 we had each individually come to the realization that every moment we existed we somehow were ruining the world. The guilt has stuck with me ever since. Those tidbits were great, I mean, glass taking 1,000,000 years to decompose?! Recycling was always seen as the savior of the universe, and as much as we realized that the world was crap, we also were told that recycling would solve all our problems.

So I recycled everything I could, and it was great! I was throwing stuff into the blue box randomly, until one day when I took a tour of the recycling plant.

First off, recycling is great, but those plants are REALLY picky about what they use. If there's dirt in it, it's thrown away. If it's at all not up to specs, it's thrown away. But the real big problem is that some plants do NOT recycle stuff that is generally recyclable, meaning that sometimes half the stuff you throw in the recycle bin goes to the recycling plant and then gets thrown away. Take polystyrene as an example. In Ottawa, we were told to recycle the polystyrene we had, and dutifully did so. Of course, upon further investigation, it turned out that the Ottawa recycling plant did NOT recycle polystyrene, and sent a mere two trucks full a year to the plant in Toronto that can recycle it. Needless to say, that pretty much means that all polystyrene thrown away in Ottawa goes to the landfill anyway. Other things, such as PVC plastics and all waxed cartons including Tim Horton's Coffee

Cups, juice boxes, and milk cartons, can't be recycled at all, since there are no plants in North America to recycle them. Throwing them away might save your conscience, since you feel like you're throwing away less, but in fact, you're not. Even the vaunted blue box program itself is less prevalent than everyone thinks it is. In Ontario, the first Canadian Province to adopt the Blue Box program, there are 3.8 million people with access to curbside Blue Box pickup. That sounds good, but in fact, there are over 12 million people in Ontario, the vast majority of whom live within an urban setting where the Blue Box program could easily be instituted. It comes down to the classic answer for everything: Money. It costs A LOT for a given municipality to organize a recycling program, and then they have to invest in shipping the recyclables to the appropriate plants. This can take on nightmarish qualities, when sometimes there are 40 different products in a given blue box, each requiring sorting and processing, then shipping to a potential location as far away as California, to be recycled.

If we were to do an energy analysis, it would be interesting to see how much more energy we're saving by recycling a given product. Since it takes gas for the truck to pick it up at your door, energy to process it, then energy to ship it, then energy to actually recycle it, by the time all is said and done, some would say it's actually more efficient to just continue to strip mine it, then throw it away once. . .

But we can't do that, since the whole idea is to be sustainable, which would mean eventually, you'd run out of stuff to strip mine in the first place. In that case, recycling IS necessary, but the exorbitant costs on the individual municipalities precludes 100% recycling of all possible products for each one. In some areas you can recycle plastic bags, and in others you can't, in some you can recycle textiles, in others you can't, etc.

In my opinion, the only way you can maximize your efficiency with recycling, would be to offload some of the responsibility to the provincial government. It makes sense, really, since the province has much more interest in maintaining a 'clean' image, and would be seen as a pioneer all over again. The Province could institute a provincial program, where the only thing the municipalities would do would be collection. The recyclables could then be corralled to a few massive central provincial sorting and processing plants, and then shipped to the actual recycling plants. In this way, the municipalities would be able to spend money only on pickup, would be able to accommodate the full range of recycling possibilities, and the economy of scale would work for all involved. It would also allow smaller municipalities who cannot afford recycling programs now, due to the plant costs, to begin curbside pickup, and access all the current recyclables that are not being tapped. In fact, if done correctly, it might even allow enough supply for a few more actual recycling plants to open in Canada. This would create jobs, reduce travel time to the more distant ones, and allow the recycled products to be returned directly to the Canadian economy.

Of course, there would be a lot of money involved to begin such a change. Then again, we have surpluses now, and the economy is doing well, and heck, maybe I could convince the government to do so.

Whatever we decide to do, the current solution is an incomplete one, and there is a long way to go, since the average Canadian still produces 1.8 kilos of garbage a day. That means the average Canadian family of 2.5 kids produces two metric tonnes of trash a year, which is still one of the highest rates in the world. Hopefully, these numbers will decline in the coming decade, with the help of a robust recycling program.

Behind the Masks

Christos Sarakinos
4A Electrical

SARS. West Nile Virus. Mad Cow Disease.

It seems impossible to go through a day without encountering these frightful words. The big question is whether or not we should really be afraid. There appear to be two conflicting mindsets on the matter.

There are those who believe that the media has blown things out of proportion, and there are those who believe that the government has tried to cover up the evidence. The former seems plausible, while the latter, for the moment, would seem impossible to ascertain.

In any case, here are a few facts taken from the Health Canada website:

- As of May 29, 2003, Health Canada has received reports of 350 suspect cases of SARS.

- Within the past week, a typical day has seen an average of 11 active cases, and 25 suspect cases of SARS.

- Health Canada is advising the public that there are no proven home remedies, treatments or preventives for SARS.- Most people infected with West Nile virus got it from the bite of an infected mosquito. - It is estimated that fewer than 1% of mosquitoes in any given area are infected with WN virus.

- Most people infected with WN virus have mild symptoms, or no symptoms at all; people with weaker immune systems are at greater risk for serious health effects.

- The consumption of beef infected with Bovine Spongiform Encephalopathy (Mad Cow Disease) is believed to lead to variant Creutzfeld-Jacob disease (vCJD), which is deadly.

- There have only been two cases of BSE ever diagnosed in this country: one in 1993 and one on May 20, 2003.

- As of August 2002, there has been one confirmed case of vCJD in Canada, a male who had multiple stays in the UK during the outbreak of BSE.

So, as of the latest data at the time of this writing, there are only 11 active cases of SARS in the entire country, a very small percentage of mosquitoes carry West Nile Virus - whose bite most healthy people would survive, and only one person in the

history of our country has been known to die from eating beef with BSE. Maybe we're not really in peril, after all ...

Then the questions remain, why all this attention? why all this worry? and why all this fear?

It is generally held to be true that leading a well-balanced lifestyle usually results in longevity and good health. Accidents and many forms of cancer have been the only challengers of this belief -

until now. I submit the reason is that these three issues shatter the illusion that we have control over our own lives, because their consequences are immediate and because one can be stricken while performing everyday activities.

Person A is single. He drinks little, fornicates even less, and does not smoke. He eats a well-balanced diet and exercises regularly. One day upon finishing work, he takes the bus home. He walks from the bus stop to his door. Once at home, he makes himself a nice beef stew. Little does he know that the person sitting next to him on the bus, the person who was coughing on him, had SARS and that now he has been infected. He also doesn't know that he was bitten by a West Nile-carrying mosquito on his short walk to his door, and that the stewing meat he used to prepare his meal came from a cow infected with BSE.

While this scenario is ridiculously unlikely, it does highlight people's fears: that going innocently about their day, they might suddenly become infected by a life-threatening virus or disease.

I recently overheard an elderly woman reflect in public that "young people haven't lived enough to realise how little they control their own lives. Being young, they are far too naive, and think that they are invulnerable." Looking at the above statistics, I do feel rather invulnerable, as the likelihood of falling victim to any of these is so slim. I am not particularly concerned about SARS, about the West Nile Virus, or about Mad Cow Disease.

In fact, I am rather fed up of hearing about it and do not believe that any of us should be afraid. We should enjoy life and realise that we have the world on a string. As for me, I ain't scared of no bugs!

"The big question is whether or not we should really be afraid."

"...it does highlight people's fears: that going innocently about their day, they might suddenly become infected by a life-threatening virus..."

The Heir of Ardun: Part 2

Mike Moffet
Guest Writer

In the secluded woods of Threlain, the only thing that could be heard was silence. But what this silence suggested was far from true, because for every step you took into the forest, another arrow was aimed to take you out before you presented any threat. For the border patrol of the kingdom of Threlain was always cautious, and preferred to silence any intruder lest they discover the hidden capital. In those days the race of elves was already on the decline, and they preferred as little contact with the outside world as possible: Especially humans whose rapid expansion and conquering mentality had done much ill to the nation of the elves.

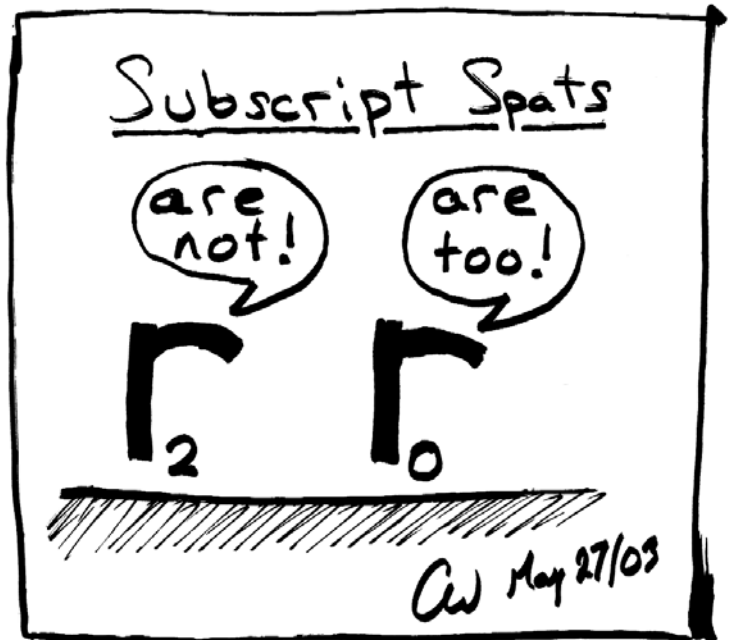
Many of his people believed that Bruen's feelings toward humans were the result of his human heritage. They may have been partly right, but the truth was deeper. No, he noticed something others missed, that humans weren't so much a threat as a key to the future, a future that just might mirror the splendor of ancient days. Or maybe it was because he had more contact with the other race than most, since he was no ordinary peasant in the elven world; no, he was the captain of the border patrol. With the sword he excelled, and with the bow his arrows always flew true.

So it came that one night, as Bruen was patrolling where the woods met the feet of the Mountains of Sorrow, that a foreword scout reported something not seen in many a year. For it appeared that a band of skeletons had entered the forest, making a beeline for the capital city. Heading on a course to intersect the creatures, Bruen and his men took every shortcut they knew

and reached the legion within hours. Upon spying the things, a sense of fear welled up inside of Bruen's men, for these were no ordinary skeletons. They marched in distinct battalions, each carrying a shield with the insignia of a skull with red eyes on it. Dividing his men into three sections, they rushed the creatures in a pincer move.

Many a skeleton was smashed that night with maces and morning stars, flails and war hammers. Soon all that was left was about a score of skeletons and their leader: A man (at least I they assumed he was a man for his face was hidden by a visor) that wielded a massive two-handed sword. His armor was that of plate, black as a star-less sky. The rest of his men engaged with the remaining skeletons, Bruen approached the figure, flail in one hand and buckler in the other. Drawing his massive sword, the figure spoke "He who challenges me shall die, but he who joins shall live forever as one of my minions." Bruen charged him eyes narrowing, an irresistible desire to kill the creator of these abominations rising within him. The figure, predicting the rush, quickly side stepped him, swinging his blade at the now exposed back. Cutting deeply, Bruen fell to the ground. Crouching down next to him, the figure raised his visor revealing glowing red eyes before striking him with the flat of his blade.

Editor's Note: The Heir of Ardun is a 5-part short story written by Mike Moffet. The Iron Warrior will be publishing one of the 5 parts sequentially in each of our 5 issues. Be sure to check the next issue of the Iron Warrior for the continuation of the story.



Mutant Dog Watches Construction



<http://mutantdog.dyndns.org>

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