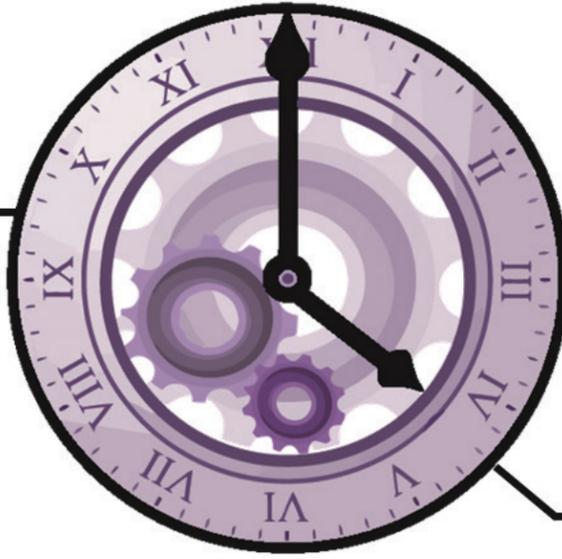


THE IRON TIMES



SHOW US YOUR ELBOWS

THE CARLETON STUDENT ENGINEERING SOCIETY'S OFFICIAL PUBLICATION

SEPTEMBER 2013



WELCOME TO THE JUNGLE
P.3



HOW TO GET INVOLVED
P.4



FUNEMPLOYMENT
P.8

IN THIS ISSUE...

WELCOME TO THE FLIGHT-SUIT FAMILY
P. 6

AN ODE TO NETFLIX
P. 8

STICHIN' IS BITCHIN'
P. 10

THE GREAT CONSOLE DEBATE
P. 13

THE WOMEN WHO CHANGED HISTORY
P. 17

CALL SIGN CONUNDRUM
P. 21

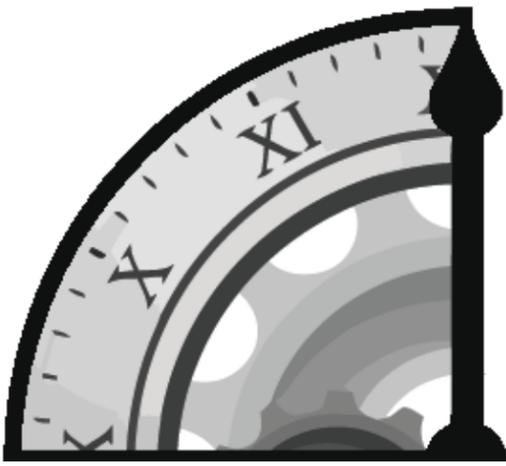
HOROSCOPES
P. 24

ENGFROSH EDITION



IT'S LIKE COMIC-CON!
(BUT SWEATIER AND WITH LESS WOMEN)- P.3

Warning: This newspaper may contain offensive material and should not be read by people who are easily offended. All opinions expressed within The Iron Times are solely those of the writers and contributors, and do not reflect the views of CSES unless indicated otherwise. This paper is jestful and satirical in nature and is not intended to be malicious in any manner.



EDITORIALS

♪ MEET THE NEW BOSSES...

From the Desk of the Editor

Taking the Reins

Allan "Bass" Bassi

-AERO II-

It's an honour to be writing this introduction, and it has been an honour to have worked with everyone on the Iron Times' staff this past year.

It was a little over a year ago that I was taking the day off at my high school, traversing Ontario universities from Hamilton to Toronto (not very thorough, I know, but gas is pricey), and looking for that special place to call my new ~~pub~~ home for the next four-to-fifteen years.

Being of the aeronautical orientation, I was naturally drawn to Ryerson University because - as all aero students know - there are only two non-military schools in Ontario that will teach you about planes and still give you a B. Eng.

It was at this disappointingly Toronto-nian school that I stumbled upon my first engineering newspaper: The Golden Ram.

My juvenile brain was blown wide open by the mature, thought-provoking writing contained inside this holy tome, like:

- The ex-school mascot's firsthand account of being groped by old women
- One engineer's discovery of the "dragon-on-car" fetish (Don't Google it... or do, I don't care)
- An advice column in which the writer gives advice... and then follows it up with a pop culture spoiler (bastard ruined Dexter Season 4 for me)

But what caught my eye most was the profanity... dear God, the profanity.

Each semi-edited, shoddily-formatted article was a fustercluck of dick jokes and ripping on the low alcohol-tolerance of Frosh.

This was my mental picture of what an engineering student paper was... until I went to the Carleton summer/Frosh orientation and had my journalistic virginity torn asunder.

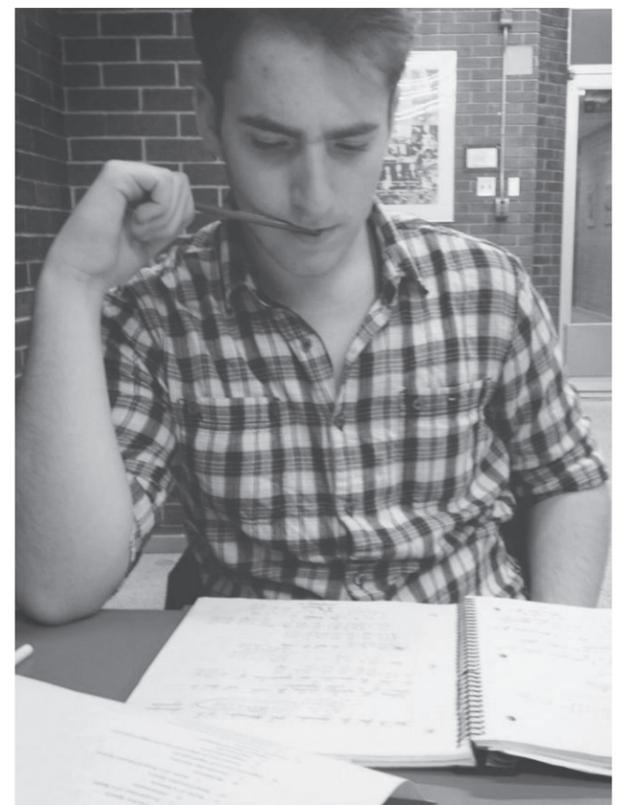
The Iron Times was laid out on its own table, and instantly caught my eye. My mentor-of-sorts, Gilles Messier, was posing in front of a myriad of blueprints, Trevor Irwin wrote a beautifully inspiring article entitled "On the Efficiency of Fellatio", and - the crème de la crème for a Grammar Schutzstaffel such as myself - Kati's "The Sidwall Bottom 7even" in which last year's VP Publications outlined the seven most grievous writing no-nos.

Sitting on Facebook one night, I saw Ms. Sidwall advertise for a new writer to cover a Gossip column. Knowing/caring nothing about celebrity gossip, I didn't hesitate to sign up, and I've had a blast as a columnist/editor ever since.

The Iron Times is a living, evolving part of the Carleton Engineering community. It is a place where the readers have damn-near total control over the final product, and a medium where:

- The President of CSES can give you tips on how to tone your body for speedo season
- Redbull-induced projectile vomit makes the cover page
- Upper-years can list off all of the household items which can be used in place of a condom (along with an accurate disclaimer)
- A horoscope which reminds you what a sad sack of hopelessness you are (but at least we're all boned)
- Gripping monthly columns about everything from celebrity gossip to historical engineering feats

It is a project which will be sad to see dedicated leaders like Kati Sidwall and Gilles Messier leave (although it was their 9th Year...), but as the next Editor-in-Chief, I'm hoping to keep this paper at its high standards of grammatically-correct, high class inappropriateness/intrigue.



I want all friend-gineers to anticipate each new issue of the Times, and go out of their way to pick up a copy at Leo's, and I want every student to feel engaged enough with our paper to want to speak their mind and contribute each month.

If you feel that you have something to write about - be it a summary of the most recent kegger, an exposé on the effects of flatulence on the International Space Station, or a monthly review of first-year professors - just submit it to:

publications@cses.carleton.ca

Hopefully we can all make that happen, and good luck in your classes this year!

EDITORIALS

...SAME AS THE OLD BOSSES 🎵



Welcome to the Jungle

Jasmine "404" Shaw
-BMED II-

Yes, we have fun and games.

Greetings, Frosh of 2013! I hope that you read this before EngFrosh ends, so that you may heed my advice that I am generously passing on to you in this article. I would like to firstly congratulate you for accepting your offer to the faculty of Engineering and Design here at Karleton, where the "K" stands for quality. In due time, you will realize that you made an admirable decision when you chose this university; not many who unwillingly venture into the realms of Carleton Engineering escape with their lives... but for those who do it of their own free will, they have a hell of a time.

You have made yet another wise decision if you are participating in EngFrosh. Throughout the week you will meet people who will remain your friends for the entirety of your university career, as I have, with many others before me. But, in order to do so, you have to participate! So here's how:

Monday may seem like a blur to you. There are so many people and faces that you have never seen before, so it can be overwhelming. But, if you embrace the wonderfulness that is EngFrosh, you'll have a great time – trust me. EngGames are a blast; you get to work with your teammates to try to win brownie points from Spirit. Then, during the bus tours, FLAUNT YOUR ELBOWS LIKE IT'S YOUR LAST BLOODY DAY ON EARTH. You'll understand soon enough. Later on, at Tailgators, just talk to people! It can be hard if you are shy, but find people who suck at pool (I mean, who the hell is actually good?) and have a grand ole time.

Tuesday is an incredibly fun filled day, especially if you participate in the White Water Rafting. The pit stop on the bus ride over is quite entertaining, as it usually involves a competition of sorts. It goes as follows: brave lads or lassies from each team sacrifice themselves to participate in an age-old contest: seeing who can consume the most of a certain unappetizing, revolting mixture of food and drink, without shooting it out of their mouths. The rafting itself will cause you to gain 10 pounds of muscle in your arms.

Wednesday is bland. There is no sense in denying that. Academic Orientation involves walking

around listening to various professors, administrative personnel, and other seemingly important people talk about university and what to expect from your courses, etc. I'm not going to tell you to not attend, but, if you don't think it's vital to your degree, then don't bother.

Thursday is your first day of classes! Prepare for the same speech from each professor: "Look to your left, and look to your right. Those people will probably not be here by the time you graduate." Don't take it too personally. The evening is a great time though, with "Heads Idol", where your heads embarrass themselves by dressing up as members of the opposite sex and singing out-of-pitch songs. Then, we all walk over to the Mayfair Theatre and get loud. And by loud I mean 20,000 Orcs and Uruk-hai standing outside the walls of Helm's Deep loud. Prepare to lose your hearing as well as voice.

Friday is the second day of classes, but don't anticipate doing much. You will most likely just be reviewing the course outline. Later that night is the Laughatorium, a comedy night sponsored by Yuk Yuk's. These guys and gals are hilarious – brace yourselves, painful stomachs are coming.

Saturday is when the real fun begins. During the day, your team will take part in a scavenger hunt in the Byward Market. It entails challenges that you must complete if you want to win. They're fun, silly, and competitive. Don't be afraid to get weird. After you've returned to our humble abode (i.e. Carleton), boat building begins. This is an overnight event where each team is given materials from which they have to build a functioning, floatable boat. I'd suggest bringing blankets and a sleeping bag, because you will most likely be crashing in the parking garage, which can get a tad chilly in the evening hours.

Sunday, you will race your masterpieces in the Canal. If you decide to volunteer as tribute for your team, your arms will resent you forever or you'll have a chance at a nice midmorning dip in the canal. 'Tis a long journey from one end of the Canal to the other, but eternal glory awaits you if you and your fellow rowers win. After the fuss about the boat

rages has died down, it's time for closing ceremonies. As emotional and heart-wrenching as they are, the week-long anticipation finally reaches its climax: the winners of EngFrosh are announced. Don't be too discouraged if your team didn't win, that's not what the week is about (cue sappy, nostalgic advice). It's about creating memories. It's about team bonding. It's about getting weird. And most importantly, it's about making friends with whom you will be able to endure all of the hard times and good times...

LOL JK it's about winning.

9 Rules for New Engineers

Alice "Firecrotch" Fernandes - ACSE II

1. Know the laws of thermodynamics:

First Law: you do not talk about thermodynamics

Second Law: you DO NOT TALK about thermodynamics

2. If you're having trouble with homework, chances are someone has already done it either: the week before, the previous semester, or 2 years ago. Look for those people.

3. Leo's Lounge is the best place to go for snacks. Or to procrastinate and play cards. Or to not procrastinate and do homework. Or to buy C-Eng swag. Or to volunteer on your shitty one hour break between classes. My point is, go to Leo's.

4. Go to Oliver's with friends: it's cheaper splitting a pitcher than buying a pint or two just for yourself. Also, drinking beer alone at a bar is depressing (trust me, I know).

5. Go to your classes, even if you think you're not going to pay attention or understand anything. You'd be surprised at how much you take in by at least showing up and looking up at the board when you're waiting for your next game of Candy Crush.

6. Boys: Yes, there will be girls in your classes. No, they are not all single.

Girls: Yes, there will be girls in your classes. (I know, shocker, right?!)

7. Make friends with artsies: they will most likely be the ones you go to for proofreading that paper for that elective you don't really care about.

8. Elbows are sexy; if you've got it, flaunt it!

9. I can't think of a ninth, and Breaking Bad is on... Oh yeah, don't procrastinate!

Head: Jasmine Shaw

Spirit: Allan Bassi

Facils: Alice Fernandes, Connor Childerhose, Kristen Jerabek, Ali Piwowar, Robbie Zuk, Jake Lipohar, Kenneth Chow, Owen Maxwell, Zoe Crowston, Gilles Messier, André Riel, Ben Sutton, Trevor Irwin, Paul Benoit, Leah Morrell, Antish Gopauloo, Caitlin Hart

THANKS

To all of our faithful readers - and contributors - we give our fullest gratitude. The Iron Times is a fully student initiative. We have homework, labs, and jobs, but we care so much about giving you funny bullshit to read that we do it anyway.



EDITORIALS

ASK NOT WHAT YOUR SCHOOL CAN DO FOR YOU

Involvement and You!

Or: How to Change Carleton for the Better

Connor "Mr. Nice Guy" Childerhose
-Enve. Sci V-

Good day everyone and welcome to another year at Carleton, more specifically, the Carleton Engineering Student Society. I'm writing this article mainly for the new people (you crazy first years) because you'll need advice on how to get involved. Take no offense by this, everyone needs help and it's very different here.

First of all, I'll introduce myself. My name is Connor Childerhose and I'm currently entering my fifth (ugh) year at Carleton. I've done my fair share of volunteer work here at Carleton so I've gathered some advice for you. I was on the Flightsuit Committee last year (the cool kids who throw all the awesome parties) and I want to help make your year better based on my experience from it.

If you haven't heard yet, last year was kind of crazy. In my years here I've never really seen it that intense. People weren't necessarily getting involved in a lot of extracurricular stuff though. We throw parties and we sell tickets to the parties. Last year, tickets sold out in minutes. People were very upset that they didn't get a ticket and were freaking out that they wouldn't be able to get a Flightsuit. We told a lot of the first years this exact same thing last year, so pay attention: going to parties is not the best way to get involved and put your name on the map so don't freak out if you don't get a ticket.

Now for some actual advice; I know for a fact that almost all of you (I'm speaking to first years now) are scared and intimidated. That's perfectly okay, I was too. You're young and back at the bottom of the food chain. However, the engineering society is filled with amazing people that I trust completely. Everyone is helpful and will show you around and help you meet people. So talk to everyone you can. Don't be scared to ask any questions or just walk up to people in the hallway and introduce yourself. I personally would love to meet every single one of you, so if you hear someone call my name, find me and introduce yourself. Getting to know people is a terrific start to your years here at Carleton.

If you have an interest, chances are there are many people who share that interest. So try and find a club that involves that interest. Love building toboggans and travelling across Canada? Try GNCTR. Love cars and like to drive them? Try the racing team. Each of your faculties has their own department club, join it and meet other people in your program. Like to sing, dance, act, and have fun? Try out for the Carleton Engineering Musical (the best thing ever). Want to get involved in the engineering government? There are plenty of directorships available for all skill levels. Joining clubs and taking on various roles in the society will surely help you out.

This one may seem a bit harsh, but stay with me. Respect your elders. I'm not talking about helping old ladies across the street (although you should still do that). I'm talking about respecting the opinions and advice of us upper years. We've been through it all, we've seen it all, and we know how to handle extreme situations. I mentioned above that you're back at the bottom of the food chain. You were grade 12, at the top of high school, and now you're a first year again. Don't be an asshole at parties. Don't get blackout drunk, puke, and try to start fights. Don't think you're the shit and be a big douche. You won't make friends that way and we certainly won't want you around. Have fun, but know that you don't automatically get our respect: you have to earn it. Once you can show us you're an awesome person, we'll have epic times that you will remember forever. Once you're our age, you will feel the exact same way, I guarantee it.

I'm sure there's more advice I can give you, but I just ate a whole bowl of ice and am now watching *O Brother Where Art Thou*, so I'm thoroughly distracted. It's weird, they keep popping up notes about the movie and actors in the movie, little bits of trivia and they give you sneak peeks about what's going to happen... See, I'm distracted because this movie rocks. Anyway, find me in the halls or on Facebook or Twitter or whatever and introduce yourself. I'm more than happy to help you guys out. Oh, and don't drink 151 at the party. Purple Jesus in small amounts is good, but avoid 151 if you know what's good for you. Cheers.

Welcome to the C-Eng Show!

Kristen "Dorothy" Jerabek
-CIVE III-

The C-Eng Musical is here again,
To make you laugh and bring your friends.

With jokes of physics and of math,
Here's how we started on our path.

We dance, sing, play and act.
In 2011 we made the pact
To provide a place for engineers
To prove they have more than just cheers.

And so a new tradition born,
To raise ourselves above the scorn.
That engineers can't do the arts,
They just make jokes and laugh at farts.

We said we would put on a play,
A parody as some would say,
Written and played by engineers
Of different streams and different years.

This year Hairspray is the goal;
But who will play the leading role?
A band, a cast, and a stage crew;
Anything you'd like to do?

Look us up at cengmusical.com!
Auditions are soon; bring a friend along,



EDITORIALS

DO WE KNOW OUR READERS OR WHAT?



The Essence of Breasts

Jasmine "404" Shaw
-BMED II-

I am presuming that since Carleton Engineering consists of an abnormally great percentage of males, the title of this article has intrigued you. Especially since it was written by someone who possesses real breasts, not some software engineering kid who sits in his mom's basement playing Minecraft all day.

For those of you perverts who are expecting me to satisfy your curiosity about my breast size, unfortunately that is not something that will be discussed in this article. However, it will consist of what the day-to-day trials are of having quite a voluptuous pair (oh no, I gave away my size) of honkers.

Firstly, let me clarify that boobs themselves really aren't that sexy, when you think about it. All they are is a fat gland that starts squirting out milk when we get knocked up. What's so attractive about an udder? I personally believe that men only actually like the idea of cleavage, because it gives them something to stare at when they have nothing better to do during class.

Now, about the day-to-day trials. I suppose that phrase is a bit of an overstatement, because they usu-

ally don't get in the way too much. But sometimes, damn, I really wish they weren't there. For example, if you came to the C-Eng musical, WD-40, you'd notice that during the song Cruel Inventions there was a lot of cute hopping up and down and bouncing. Well, unless you own a very reliable sports bra, your ladies are going to go ALL over the place. And that is not fun. There's nothing worse than an accidental nip slip on the Kailash Mital stage in front of 444 people. Something else that maybe only bugs me (mainly because I'm cheap as f***) is that they're expensive to maintain! Think about how much a bra costs, how many you need to have clean at a time, and especially if you're still developing, how often you need to buy new ones... That is a lot of money. In case you boys have never stepped foot into a La Senza, a mediocre bra costs about \$25. Then if you want double push-up, lace, or whatever other frivolous thing us females enjoy, you're looking at anywhere from \$40-\$100! All because of these damn jiggly balls of flesh.

I realize that I haven't given boobs much praise, because at the end of the day, I really do enjoy them. They just get in the way sometimes. So now I'll tell you guys what I truly find wonderful about boobies. This might sound hypocritical because I just said I'm cheap about bras, but lingerie is a different story. Although my single self has no one to show it off to, wearing a corset to bed with sexy tights is probably the most satisfying thing a female can do

for herself. And if you aren't a lonely gal like me, then show it off to your man! Trust me, he will enjoy every minute of it. And he'll enjoy taking it off. (I should just start a love/sex advice column. Hmm...)

Another perk of our perky protrusions is that they act as wonderful cushions for loved ones. I'm serious. If ever you're out with your boyfriend, lying on the grass, star gazing (HAHGAY), then you'll understand. Men really do appreciate the squishiness and comfort of our breasts.

Above all other factors, the most useful and beneficial aspect of having squishy sistas is that you can get away with pretty much anything. Caught driving under the influence? No problem. Just lean out the window and push those ladies together and it never happened. Late to hand in an assignment? No problem. Just get real close to your Indian TA and show off your cleavage and he'll give you an A+ without thinking twice about it. Too lazy to wait in line at Starbucks? Just go up to the barista and show him your venti and he'll get you your coffee stat. So, as you can see, we can pretty much get our way with anyone, no matter the situation.

So in conclusion, we do love our boobs, as I'm sure you, fellow male engineers, do as well. But I must ask of you only one thing: if you're going to gawk at them during class, please try to hide your boner.

The Colours of Fall

Anonymous

This summer was definitely hot. Temperatures were varying from 27 degrees Celsius to 42 degrees Celsius. However, sometimes it felt like it was boiling at 100 degree Celsius, thanks to the additional 'hotness' that some people brought to the atmosphere. There hasn't been one time when I was downtown and didn't catch myself staring at those trendy attires some people were sporting. Trying hard to keep up with the fashion trends, I noticed that I was still rocking 2011 styles. Now, if like me, you are fashionably old-fashioned, let me update you on this year's spring and summer trends. Stripes, blazers and shorts; bright colors (dusk blue, poppy red, lemon zest, and nectarine), bold patterns, navy suits (for formal events), flip-flops, espadrilles, sandals, and suede double monks were what made the males pleasant for the eyes. Their counterparts, however, were spotted wearing floral print dresses, blazers, peplum/cropped tops, and skirts that made them look more feminine; retro style attires, mini dresses showing their beautiful legs, and brazier tops for those who were keen to work out and to show off their sexy tans. Their footwear ranged from flip-flops, sandals, and espadrilles to high heels.

So, school is about to start. Some people are already rearranging their closets so that they look their best on the first day of class. Now, now, just because we want to be engineers does not mean that we can-

not dress well and look good. Just imagine yourself designing a bridge in a Hugo Boss or Chanel suit! My point being: be ye an accountant, a writer or an engineer, we all can attempt to look good.

In this article, I will be talking about the colours that will most likely be trending this fall and how you can match your clothes without having to worry about people wondering why you look like something a toddler drew.

Ladies:

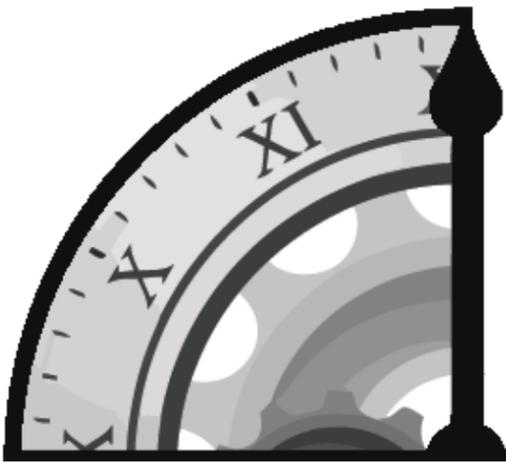
With the changing season, the greens from spring evolve and develop. Multifaceted Emerald continues to sparkle and fascinate, bringing luxury and elegance to the palette, while yellow-toned Linden Green brings a lightness and brightness to the deeper shades of fall. Try pairing both with Mykonos Blue, a bold, meditative blue, for a classic and relaxed fall look. Exotic Acai adds mystery and richness to the palette, and can be incorporated with the other colors to create a number of powerful fall combinations. Pair the elegant shade of purple with Emerald for a regal disposition, or spirited Samba Red for an expressive and dramatic look. Koi, a decorative orange with dazzling and shimmering qualities, is a statement color that serves as a pick-me-up for your wardrobe. Vivacious, an unruly and wildly deep fuchsia, adds an ebullient sensuality to the palette. Pair Vivacious with anchoring Deep Lichen Green, a naturally lush shade of green, for a dynamic juxtaposition that captures both ends of the seasonal spectrum. Rounding out this season's cornerstone colors,

Turbulence, a dark mercurial gray, and Carafe, a rich, glamorous brown, provide more interesting and sophisticated alternatives to the black basics usually worn in colder months. Both staple neutrals pair gracefully with more expressive colors within the palette, such as Samba, Koi and Vivacious.

Gents:

This season, more than ever, there is a shift towards a unisex color palette. Similar to the women's palette, the versatility of the men's colors for fall 2013 allows for more experimentation as the weather cools. Luxurious Emerald, a sophisticated and vivid green, should be paired with Mykonos Blue or Linden Green for a clean and classic look. Acai adds exotic mystery when paired with bold statement colors like Samba, while Koi remains decorative and dynamic, adding a pop of orange to a neutral wardrobe. Deep Lichen Green acts as the cornerstone color for the men's palette as well; however, pair the shaded mossy green with Beaujolais, a full-bodied red, for an elegantly masculine, quintessential fall look. Unpredictable Turbulence and warm, rich Carafe also play vital roles in men's fashion trends, serving as strong staple hues for outerwear throughout the cooler months. Create a well-balanced look by combining either neutral with Beaujolais or Koi.

These are simple tidbits about colours to keep in mind when you are picking or buying clothes for this autumn. Let this fall be glamorous, and remember... it is no longer about food - you are what you wear! So keep calm and look good!



EDITORIALS

ASK YOUR FACILS ABOUT "ENGCEST"

An End to the House of Fail

RIP 2010 - 2013

Team Fail

On this day, of our Lord and Queen, here so lies the House of Fail. From its humble beginnings as a funded student group, to the now ghetto picturesque image that continually inspires the high standards and moral values of all who know its name.

Founded in 2010, during a period of vigilant learning and constant failure, its three Founding Fathers of Fail, Ryan, Conrad, and Robbie, together against all odds went against the tyranny of past A+ students and created Team Fail. The purpose of Team Fail as described by the Fathers of Fail was simple, to act as a support service and group for those Engineering students who fell victim to failure as they had.

Team Fail provided an outlet for those among its ranks, to come to terms with their failures in both comradeship and liquid beverage consumption. No longer would students have to be shamed by their peers for countless failures and D- grades, with its elite members such as Ricky Podrebarac, Jamie Barresi, and Adam Cook, Team Fail was here to stay. Over time its member base grew to such extent, that a location was needed to house the group's weekly assembling, and so was born the House of Fail.

Many have come to accept the standards and practices set by those living in its walls as the norm of Engineering life. It is now common to hear HAH GAY throughout the halls of the Minto and Mackenzie buildings. It is now common knowledge that the Stairs of Consent are much more effective than using the Brick of Consent. It is now common practice to no longer say "no homo" on Sundays with the introduction of Gay Sundays, where anything and everything is considered fair game, but only on Sundays. While the list goes on, much is best to be left unsaid and left to rumor and myth.

It can be seen that it is no coincidence that the House of Fail won the Animal House award this year at Reflections, from hosting FSK, Facil Pub, and numerous other events, the House of Fail has become a staple monument of its time. With time though, all things come to an end.

So it is with the deepest sadness that all of the founding Fathers of Fail and all House of Fail members are at the end of their 5-year Engineering run. Upon their graduation, so falls the current House of Fail into the fiery oblivion, but like a phoenix from the ashes, the House of Fail is reborn anew, with its new owners.

We the current members of the House of Fail would like to thank the C-ENG community for the 5-years of extraordinary memories and good times (some of which we forget).

Signing off for the last time is Robbie "Qubit" Zuk, Conrad "Bum-dart" Collins, Andrew "Jack Johnson" Campbell, Kati "Spicy Beaver" Sid-wall, and Ryan "Skydump" Kologinski.

HAH GAY!

6

Welcome to the Flightsuit Family

Ali "Whipped Cream" Piwowar
-B. ARCH 2013-

Editor's Note:

Ali was a member of Flightsuit Committee for the 2012-2013 year. After her graduation she provided a little memoir for The Iron Times, and I think that it's an inspiring piece for any engineers who need motivation to get involved this year.

Dear C-Eng,

I would just like to take this opportunity to thank you for your participation and involvement this year. This being my last year, I have done a lot of reflecting. Thinking back to my frosh week 4 years ago, I remember falling in love with the spirit and excitement of the engineering community at Carleton. It amazed me how so many people wanted to get involved and be a part of the unique engineering culture at Carleton. My head told me during frosh week "architecture students don't have time to associate with engineers. After this week we'll never see you again." I proved him wrong.

Over my time here, I was Formal Events Director for CSES, Designed EngFrosh logos, participated in EngFrosh as a facil and head, and volunteered at Leos. In addition, I also attended a ridiculous amount of parties and social events. This past year, I was able to be on the GNCTR team as I designed and helped construct the technical exhibition. The trip to Vancouver is best described as EngFrosh on steroids. I'm so happy to have had the opportunity to participate in the legendary GNCTR during my time at Carleton.

I was honoured to be elected onto Flightsuit Committee and have the opportunity to plan and attend many events with all of you throughout the year. FSK's are always a hit. Though personally I did not enjoy getting covered in apple juice, I did thoroughly enjoy watching you all act like lunatics.

There is not one individual event this year that has particularly stood out in my mind so I'd like to share a little flightsuit inspiration with you. Earning a flightsuit is bigger than any one event. It's more than a smelly, oversized, zipper-malfunctioning, ripped and torn, navy blue, one-piece costume. It is what it represents: the family of smart, involved, talented, and crazy Carleton Engineers. Zipping up my flightsuit for the first time 3 years ago made me proud. To this day, when I flightsuit up, I know I am representing Carleton engineering and it makes me walk a little taller, hold my head a little higher and scream a little louder.

For those of you who have one, you know what I'm talking about and for those of you that have just earned one, welcome to the family.

~Ali

Even if you have to set up a tent to get a ticket: go to FSK events!

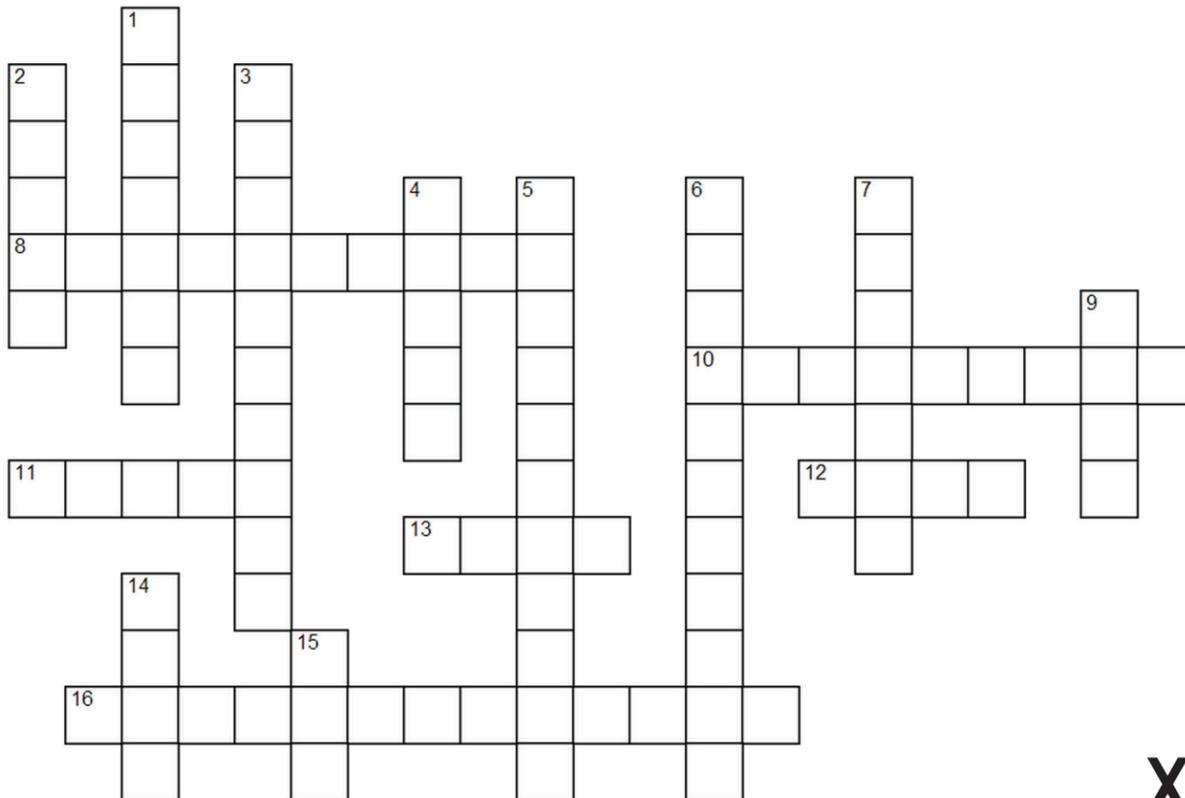
DIVERSIONS

CHANNEL YOUR INNER GRANNY



The Iron Crossword

This month's theme is: EngFrosh



ACROSS

- 8 Team who thinks they're the shi*t
- 10 EngFrosh 2006 theme (_____ EngFrosh)
- 11 EngFrosh 2000 theme
- 12 The society that represents our faculty
- 13 # of teams
- 16 The team featured in Imagine Dragons' hit single

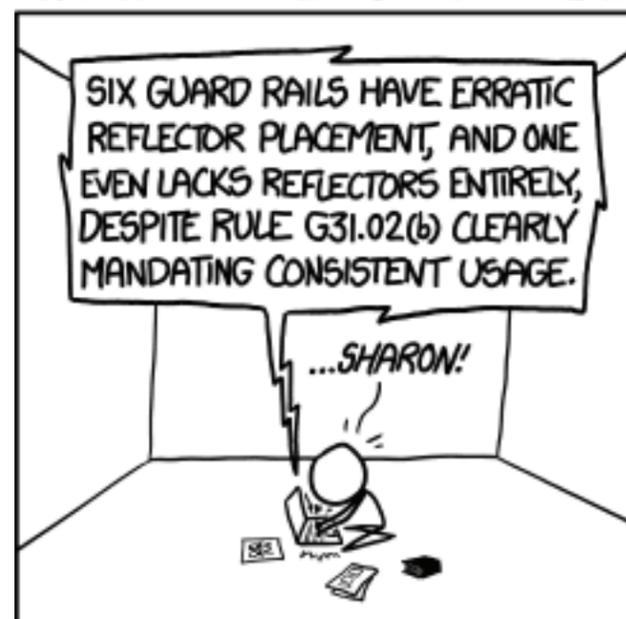
DOWN

- 1 Theatre where the movie night happens
- 2 What you will earn for impressing Spirit
- 3 Team that comes first
- 4 What you will dip in purple dye
- 5 Blue team
- 6 Yellow team
- 7 Last name of male EngFrosh director
- 9 What you will be building on Saturday night
- 14 Where the opening ceremonies are held
- 15 This Spirit was SuperFrosh in his year

XKCD

HOW TO MAKE BORING TECHNICAL REPORTS MORE FUN TO READ:

IMAGINE THEY WERE WRITTEN AND SENT IN, UNSOLICITED, BY THE ESTRANGED SPOUSE OF THE HEAD OF THE PROJECT.





NEWS

GARDENING IS VERY RELAXING

FunEmployment

A hip-hopera on the woes of job-searching.

Robbie “Qubit” Zuk
-B. ENG 2013-

Some of you are starting your first year at Carleton.

Some of you are entering your last. Some of you THINK you’re starting your last year as well. Having graduated (to everyone’s surprise) last April, I’ve had a hell of a time this summer. Let me take you now through something that has come to be known as FunEmployment; where the F stands for “Fun” and “Fucking broke”.

When you first graduate you’re full of hope. There’s the odd friend you’ve heard of that already has a job, or grad studies to go to next year. But that’s not you. No, you didn’t have straight A’s, and you didn’t get a relevant co-op job. So you sit there day in and day out applying for jobs, jobs that you’re not always qualified for. However they sound cool and you still think you’re ready to take on the world. This feeling quickly fades. It takes maybe a night or two to get bored of applying for jobs. Also you have to pack. Why do you have to pack? ‘Cause your lease is up and of course you have no idea where you’ll be next year.

Where do you go? Well considering that you have a week or two until your lease ends and you never really tried to find employment during the year, you have to find somewhere to crash. And you end up on my couch. Why my couch? ‘cause I’m sure as fuck not going home and need a “roommate” so I have something to do.

Believe it or not videogames get boring. Yes, they do. Especially after marathons of Mario Party that end in the police showing up because your neighbour thought they heard a murder. That or you realize that if you buy new games, you can’t eat next month. Furthermore you can’t drink this month. Also there’s no more government money coming your way, so videogames disappear... except Facebook games. You know, those ones that you have to take a break from so that something can happen. Those are great when you’re applying for jobs: giving you a regularly scheduled break, while not consuming your whole day. This way you still feel productive. My choice is MyVegas. It’s not entirely time based, but if you play slots you can set it to autospin and check in every 10 minutes to play a bonus, or see that you’re broke virtually as well. Also with MyVegas I can win/have won free nights at hotels in Vegas. If only I could afford to get there. And if I could afford to gamble.

You start looking at other people’s hobbies in a different light during FunEmployment. Some things you thought were boring suddenly become vastly entertaining. For example, I started a garden. Yes, that’s pretty random for an engineer. However, it will eventu-

ally give me free food; and pulling weeds, fertilizing and watering takes up an hour or so each day. An hour or so where I’m not having to stare at a blank screen applying for jobs and reading “we’re not hiring now but maybe in 6 months” emails. That and I have something to talk about when people come over. Sure your friends may have work stories, but who cares about work place drama when I’ve got corn in my backyard. Delicious, juicy, yellow, sweet corn. Well, midget sweet corn... it’s not doing so well right now.

Rediscovering old toys was also a big part of my summer. Old RC Helicopters are a lot of fun, especially for an aerospace engineer. Stacking up old beer cans and seeing if you can just knock off the top one is endless amounts of fun. I’ve also tried to spear a can onto the landing gear to lift it up... no such luck. That and when the battery charges you have time to modify the chopper itself. Stripping off parts that aren’t flight critical is a good pass time, just as fun as finding out just what exactly flight critical means. After modifications, you can fly faster, farther and longer, usually. However there is some loss to stability if you take it too far.

However every now and then something comes along. Like that friend at a moving company who needs an extra body for a day, mosaic marketing blitz, tutoring kids in summer classes, or a temporary drafting job. These things pay the bills, but don’t kill the boredom. They also keep you from having to admit defeat and move home.

You eventually find crazy ways that you THINK you can make money. Like blogging about your garden and the occasional critique on the aerospace industry or commentary on current events. You try to be smart and professional, but all the posts that get reviews are about you finding old toys or working on the garden. But hey, talking with random strangers in the comments section of your blog isn’t so bad, but you can’t insult or troll them. You want them to come back after all.

Another thing you quickly get good at being FunEmployed: knowing where all the free stuff is at. Dragon Boat Festival at Mooney’s Bay, it’s a free concert: night out and weekly entertainment budget saved. Steamwhistle is coming to town to party and it’s free? Email them a million times for an invite and that’s another week you don’t have to spend money to have fun. Friends that need help brewing their own beer? That’s a free weekend of drinking. However all this saving is cancelled out the one night you get drunk and order \$50 worth of pizza.

Take note kids: the economy sucks, filling out job applications for minimum wage jobs sucks, and you can’t work at Ollie’s if you’re not a student.

THANKS OBAMA.

An Ode to Netflix

Jake “Treehugger” Lipohar
-ACSE II-

Ohhhhhh Netflix
you rambunctious little scamper.
I forgot to do my homework
and where is my binder?

We will never fight
and you always make me laugh.
My queue is always full
and I never want to graph.

There’s always something on
when I come home from drinks.
Or when I finish ECOR
and I refrain from any thinks.

Ohhhhhhhh Netflix
what would I do without you?
Maybe I would finish labs
if I could escape you.

Your hold on me is tight;
keeps me sitting still.
I don’t want to practice
my integration skill.

Right now, just leave me
brainwashed as the masses.
I’m sure that on my own
I can fail all of my classes!

CALL FOR SUBMISSIONS

Like the content? No?

Then write some yourself, you lazy bogan!

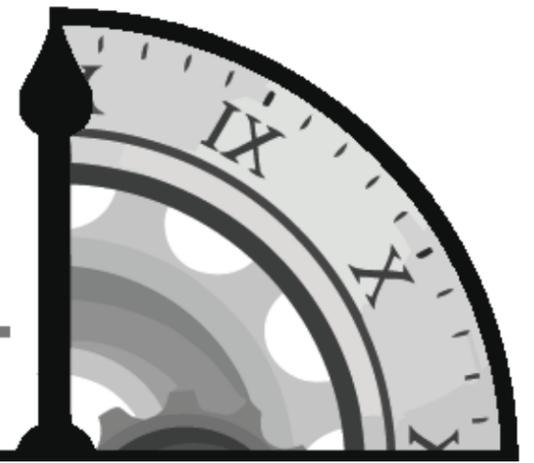
The Iron Times is always happy to accept new content from talented (or even sub-par) writers, poets, lyricists, gymnasts, or photographers.

Just send all content to:
publications@cses.carleton.ca

And look for it in the next issue!

NEWS

GOING SLOW IS FOR NERDS



The Journey of Ravens Racing

Kenneth Chow

The journey of the 2012/2013 Hybrid (4th year project) and FSAE (volunteer) Ravens Racing teams has been a magnificent one, from getting both our teams up to speed and working to strive for perfection, to reaching into new ideas and materializing them through research.

New parts and processes were created this year, including lighter, simpler uprights for both cars created by the volunteer FSAE team, tuned exhaust systems to work with the pressure waves of a single cylinder, full body stress panels from front to back, aluminum flexures for the suspension system, and many other items. This was no small task in hand considering the intense scrutineering that was placed upon all teams where Carleton's team had passed. The hard work of all striving engineers was realized first as the Ravens Racing Hybrid team competed in the 2013 Formula Hybrid competition in New Hampshire taking 3rd in Design, 2nd in Marketing, and 6th in Endurance, resulting in 6th place overall!

After this our FSAE Ravens Racing team (volunteer) entered the 2013 Formula SAE Michigan competition, which comprised of 122 teams from around the world. We were now facing off against the best from each country competing for Number 1. A new record was created coming 9th in the cost event compared to 122 teams, a new high for Carleton. At competition a lot of teams and past Carleton graduates were pleased to see Carleton Ravens Racing entered again into this prestigious event. Many past alumni asked about the school, the car and how the FSAE program was evolving, with every single one of them having contributed to the project and FSAE having aided them in finding employment. While talking to employers they stated that when hiring they were looking for the FSAE title being on the résumé because of what the entire project and competition entails. Around the world FSAE is recognized and held in a higher category compared to other events. Due to engine knocking from having to fix our engine from a cracked head, we were unable to compete in any dynamic events at the time. This was because our shop is able to drop below 0°C which froze our coolant. Our teams are trying to fix this problem but it was a very unfortunate accident which should have never happened. Overall from the competition, being a young volunteer team, the first and second years have learned what it takes to beat the best and that is what they are going to be striving towards, pushing all new members along the way. Overall scores are 9th in Cost, 34th Marketing and tied 68th in Design (full results can be found on the SAE website).

Onto the 2013 Formula North competition in

Barrie which both teams attended, with Carleton University being the only university at the competition entering cars in both classes: combustion (FSAE) and hybrid. Since both cars were prepared and tech inspected from the earlier competitions, the cars were 95% ready with little adjustments here and there. As soon as both teams arrived we were off to the races. Both cars competed in all events (static and dynamic) where the Hybrid team took first overall in their category, as well as first in the Acceleration and Endurance events! The FSAE team finished 23rd in the more competitive combustion class since the top teams from the Formula SAE Michigan competition came to join Formula North, although this was still an impressive result for such a young team. We learned a lot from industry specialists, and past Carleton Engineering alumni and teams gave valuable advice on how to improve ourselves and finding out other teams budgets and school support. We are using a smaller, more fuel efficient 250cc engine which competes against teams with larger 450cc and 600cc engines, so we are working on a new transmission for the engine which will make it more competitive next year.

I fully appreciate your time to read through

A Sheep in Wolf's Clothing

Owen "Honourary-Engineer" Maxwell
-JOUR II-

For a lot of people going into their first year of university, finding people that will accept you into their circles can be just as intimidating as high school was. Throw in to that equation being in a program without much community or events, and making friends can be a real challenge. That is of course, unless you meet some engineers.

Going into the first year of my program was a little strange. Frosh had "introduced" me to only one person in my program and after a week or so of classes, there seemed to be a loss of the eagerness to meet new people that frosh had had. But, I said to myself, "there has got to be some sort of event in my program so all the first years can meet each other, and maybe some upper years too." This was clearly not in anyone's plans, after asking around and asking upper years, it appeared that these kind of events were only intended for upper years and that there was little care for the first year students. Given that the only event close to this was a poorly attended skating and movie night, to no fault of the organizers; there should have been more consideration for the first year students.

my article through all of your busy schedules. I am very grateful for the support from the Department of Mechanical and Aerospace Engineering and the Faculty of Engineering and Design. I hope that we can further both teams and show the world what Carleton engineers can achieve against other Universities. Along with all other projects this will give another reason for more engineers to come join the ranks of Carleton Engineers and future Alumni.

We are doing many promotional events around Ottawa which everyone is more than welcome to come and see. The first will be attending and demonstrating the cars at the Ottawa Ferrari Festival on June 15. Others will be the Motorsport Club of Ottawa events, CAPS Show and Shine (Orléans) and many others.

Please contact me anytime for more information about our project and teams. My email is iskennethchow01@gmail.com, or contact me on my mobile at 416-737-8339. Thank you again for reading through my little blurb about Ravens Racing and hope you have an awesome week.

So in my frustration, I decided to start hanging out with my friend in engineering in my downtime so I could at least meet some of his new friends. Strangely enough these people were all geeks and eager to welcome new people. Within a few weeks I'd made more friends than I had in my program and soon enough I'd even been to some engineering events, earning a call sign at my first FSK party.

The moment I definitely felt welcome was when I joined the engineering musical, if the large group of fellow geeks made me feel welcome, then adding our mutual love of music would solidify it. There was never any exclusion because I was an artsy and some even assumed I was an engineer. By the end of it I was even being backed up in arguments with other members who were engineers.

All in all, my time with the engineering community has been a blast so far. They've been welcoming, geeky, and almost too excited for any excuse to party. It's exactly what I want out of a university community and I doubt most programs even compare. All I can say is Thank You to the people that make this community what it is and keep it welcoming to outsiders with nerdy tendencies.





NEWS

KAMA SUTURE-A

Stitchin' is Bitchin'

Zoe Crowston

-ACSE II-

September, the start of a new school year... For some of you it is your first year in higher education, others it is your sixth (It happens). It is also turning into autumn when, before we know it, the weather will take a turn from beautiful sunshine to cold as a Polar Bear's butt. So, in preparation for the impending cold, I will explain why you should learn to knit. I would try to explain how to knit but YouTube does it better than I ever will in text.

Knitting isn't just for your grandma, or for that cat lady that lives down the street. Since most of the readers of the Iron Times are dudes I will point out that knitting isn't just for girls. In fact as a man, knitting will up your sex appeal from non-existent to hot damn! The ladies will do a double take at a guy knitting and purling his way on a scarf. They'll see you with your needles and they might think:

"Wow! If he can concentrate on a scarf, he can concentrate on me"

"That scarf looks cute; maybe if I sleep with him he'll give it to me"

"That isn't crochet is it?"

Knitting does not equate to getting the girl. And ladies, guys think pretty nice things when they see a chick knitting. However, they don't approach the female knitter as often as girls talk to male knitters. But people start talking to a person that knits, even if it's something dumb like pointing out their grandmother does is too. You'll enjoy staring at a person knitting, it helps you get over any shyness you might have.

Knitting is a great stress reliever. When working on a scarf while on the bus, your concentration shifts from that fucking lab or test that has been driving you loco, to the task of knitting, which makes you less anxious. There are studies to support that shit, and that knitting helps release chemicals in your brain that make you happy and calm.

As long as you are not doing the 12 foot long scarf of the fourth Doctor, you can just keep it in your bag. Last year I knit a lovely pair of fingerless gloves during my Intro to Architecture lectures and just kept my work in progress in my backpack. You can make projects as small or as big as you want. You can have a pair of mittens that you work on only on the bus on the way to school, it doesn't take much commitment. You can do a couple rows then put it down and nothing life shattering will happen.

Also, it keeps you warm and winter gets cold and nasty, so time to prepare. It can save you a couple bucks for Ollie's to make your winter wares yourself. You can get yarn on the cheap at places like Michael's or Wal-Mart.

Knitting gives a huge sense of accomplishment; it's frigging awesome to know you made something out of some yarn and two sticks. If you want to learn this is what you'll need:

Knitting Needles - If you are too cheap for that, chopsticks or two pens will work

Yarn - For cheap people, Pinterest has taught me that you can make yarn out of an old t-shirt by cutting it up into a long piece

That's it! I hope that I have convinced you that knitting is worth a try. If you ever see me around campus I can attempt to answer any questions or you can point out that I am an old grandma... whatever floats your boat! I really think you should try it. It is fantastic and has a lot of benefits, and it's awesome.



NEWS



"HOUSTON, WE BELIEVE WE'VE SPOTTED YO MAMA"

Cheapest to Orbit

The tragic saga of OTRAG.

Gilles "Nightstalker" Messier

-B. ENG 2013-

On October 8, 2012, a SpaceX Falcon 9 rocket blasted off from Kennedy Space Centre, Florida, carrying an unmanned Dragon capsule loaded with supplies for the International Space Station. The successful mission, the first of NASA's Commercial Orbital Transportation Services (COTS) program, ushered in a new era of spaceflight, which will see launch services increasingly handled by private enterprises. This move away from government-funded space programs promises to significantly reduce the cost of reaching orbit, opening up space to more people than ever before. The dream of affordable spaceflight, however, is not a new one. In the 1970s, a lone maverick set out to challenge government monopolies and form the world's first private space company, using a revolutionary new technology to reduce the cost of orbital launch tenfold. Hounded at every turn by nervous governments and jealous aerospace companies, he came tantalizingly close to kicking off the commercial space revolution 40 years early. His name was Lutz Kayser, and his unique vision was known as OTRAG.

By the early 1970s, six nations had successfully developed orbital launch capability: the USSR (1957), the U.S.A (1958), France (1965), Japan (1970), China (1970) and the UK (1971). These achievements were all the products of massive government projects, and extremely expensive; indeed, shortly after orbiting their first satellite, Prospero, the UK cancelled their Black Arrow launcher program in favor of the Europa rocket, being developed by the joint Anglo-French European Launcher Development Organization (ELDO, precursor to the modern European Space Agency). To reduce costs, Europa would mainly use existing hardware, including the cancelled British Blue Streak ballistic missile. Despite these cost-cutting measures, however, a series of early failures sent Europa's development budget spiraling out of control. West Germany, who produced Europa's Astris upper stage, began to wonder whether there might be a cheaper alternative. In 1971, the German Federal Research Ministry put out a request for proposals from industry for a cost-effective German satellite launcher.

Among those who rose to the challenge was 32-year-old aerospace engineer Lutz Kayser. Kayser had studied under pioneering rocket engineer Eugen Sanger (inventor of the regeneratively-cooled nozzle) at the University of Stuttgart, and in 1954 had founded the German Association for Space Research, a group of student space enthusiasts mentored by Sanger and his wife. By 1971 Kayser had already built an impressive career, developing engine parts for the Saturn IB rocket, designing one of the first bipropellant reaction control systems (RCS) for the U.S. Air Force, and inventing a capillary-action liquid-gas separation system to allow rocket engines to operate in space. Following a string of disastrous failures of the Europa I rocket, Kayser performed a structural analysis and discovered that the second-stage propellant tank bulkhead

would collapse under excessive vibration, causing the rocket to explode. As the flaw proved prohibitively expensive to correct, Kayser's report led to Europa I being cancelled.

While working on Saturn IB, Kayser became interested in the concept of clustered engines. Wernher von Braun had built highly-successful Saturn on a budget by clustering eight surplus Redstone propellant tanks around one Juno tank, along with a thrust plate for the engines. Kayser saw this approach as key to solving Germany's launcher problem, and in 1971 founded Orbital Transport und Raketten AG (Orbital Transport and Rockets, inc, or OTRAG), the world's first private space launch company, backed by a consortium of 600 private German investors. The project caught the attention of von Braun and Kurt Debus, then head of Kennedy Space space centre, who upon their retirement from NASA immediately joined OTRAG as Scientific Advisor and Chairman of the Board, respectively. In 1975, OTRAG was selected to build Germany's satellite launcher, beating out four established companies including Dornier.

While his competitors reduced costs by recycling surplus rocket technology, Kayser employed a radically different approach to launcher design. The OTRAG system was modular, composed of a number of Common Rocket Propulsion Units (CRPUs) clustered together. Each CRPU consisted of a 27cm-diameter metal pipe housing an extremely simple liquid-fueled rocket engine. Flat bulkheads divided the pipe into two propellant tanks, which held kerosene fuel and nitric acid/hydrazine oxidizer. The system was pressure-fed, with the top of each tank left empty and filled with compressed air, which forced the propellants through valves into a simple ablatively-cooled combustion chamber. Ignition was achieved by injecting furfuryl alcohol into the chamber, which would spontaneously ignite with the nitric acid. Depending on the application, varying numbers of CRPUs would be bundled together in parallel stages (e.g. four for a sounding rocket, several hundred for a satellite launcher), guidance being achieved by differentially throttling the outside engines. When each CRPU burnt out, it would be jettisoned from the cluster like a conventional rocket stage.

The OTRAG design was geared towards extreme simplicity and ease of manufacture; thus the CRPUs were built not of aluminium or titanium but of stainless steel, allowing them to be mass-produced using equipment from the automotive industry. This made the system somewhat heavy and inefficient, but the ability to cheaply produce vast quantities of CRPUs meant that OTRAG could theoretically achieve per-weight payload launch costs an entire order of magnitude cheaper than any conventional launch system.

Kayser began developing and static testing the CRPUs at his facility in Lampoldshausen, rapidly refining and proving the design. Even at this early stage, however, storm clouds were gathering. Aerospace companies in the U.S. were accustomed to making large guaranteed profits from government launch contracts, and were concerned that OTRAG would severely undercut their market share. Furthermore, France and the USSR, still leery from WWII, feared Germany developing long-range rocket technology. The German government thus came under extreme international pressure to shut OTRAG down. Sens-

ing trouble, in 1977 Kayser moved his operation to Katanga, Zaire (now in the Democratic Republic of Congo), setting up a rocket test range on a high plateau with a dirt airstrip for supply aircraft. Here his team conducted 3 test launches, reaching altitudes of up to 30km. Though many problems remained to be ironed out, these tests nonetheless proved the soundness of the concept. However, US and Soviet propaganda began circulating that OTRAG was simply cover for a German and South African missile program, and in 1979 the Congolese government was pressured into expelling the project. Continuing political opposition soon forced Kayser to remove his manufacturing and testing facilities from Germany and relocate them to a new site in Libya, where a new round of test launches began in 1981.

Over the next year, OTRAG conducted 14 suborbital test launches, definitively proving the concept and confirming the astonishing cost savings of the design. In 1982, however, Germany signed the Missile Technology Control Regime, which banned long-range rocket testing in developing countries. As Kayser prepared to uproot his team once more, the Libyan government unlawfully confiscated all of OTRAG's equipment. All attempts to re-acquire the stolen property proved futile. Over the next ten years the Libyan military attempted to use the captured equipment to develop their own ballistic missile, but without vital know-how or blueprints they were ultimately unsuccessful.

Kayser made one last move to Erange, Sweden, where he conducted a single test flight in 1983. Unfortunately, the rocket exploded after only 10 seconds. The cause of the failure was traced to a missing cover over one of the instruments, which created acoustic resonance that destroyed the vehicle. Soon after, the German government caved to political pressure and finally cancelled the OTRAG contract. Kayser fought desperately to keep the project afloat, but in 1987 was forced to shut it down. Germany never developed its own satellite launcher, opting instead to build join the ELDO II project, which eventually became the French Ariane.

Lutz Kayser moved to the United States, where he currently works for Interorbital Systems Corporation in Mojave, California. In 2005, he founded von Braun Debus Kayser Rocket Science LLC in the hopes of resurrecting the OTRAG modular launcher concept. According to current estimates, an OTRAG-style system has the potential to reduce launch costs below \$1000 per pound - ten times cheaper than any current launcher and half as expensive as the proposed SpaceX Falcon Heavy. Given the current trend towards private spaceflight, Kayser's dream may perhaps be realized within his lifetime. Nonetheless, the intriguing question remains: had politics not conspired to doom OTRAG 40 years ago, what would the world of spaceflight look like today?



NEWS

ARCHI- AND JUGHEAD

Ollie's: A Call to Arms

Robbie "Qubit" Zuk
-B. ENG 2013-

Ladies, gentlemen and frosh, yet another year begins. Another year in the bars, another year fighting soccer fans for seats. Another year of Thirsty Thursdays, Corona Bucket Wednesdays, and All Day Breakfast Fridays. Another year of playing cards, and drinking all day instead of going to class. Another year of doing lab reports with a nice, cold beer. Another year to make this bar...our bar.

I held down the fort last year. I made Ollie's my office. I was there six hours a day on Wednesdays, after classes I didn't have on Fridays, and whenever someone called, I came running. I was a regular, I wasn't ID'd and they knew me by name. This bar was MY BAR. And if you came and hung out with me, it was YOUR BAR too.

I was there before OSAP came; I was there after OSAP came. I was there when I had money, and I was there when I was penniless. I was there when I was happy and I was there I was hung-over. I was there trolling the bar with my music selection, and I was there designing rockets. I was there for events, and I was there for no good reasons. I maxed out credit cards, and I emptied bank accounts. I drank before class, and sent my friends to class when they had no business walking. I was there after a good day of hard work and I was there avoiding a good day's hard work. I started parties and I joined parties. I won E-Chug, I was Ollie's.

Now it's your turn. Ollie's need a new regular, and Leos need someone to round up everyone at 5 and get them the hell out of there. Our economy needs stimulation, and you have the government funding to redistribute amongst the corporations and starving, sober students of your choice. There's hockey back this year and Ollie's needs to be reclaimed. Let's not let this bar go to waste absorbing hundreds of sober, angry soccer fans. The Olympics are coming and Team Canada needs your support. Games will be starting before alcohol will be served. So, get there early to reserve your seat and your beer. Ollie's needs someone to yell at the Russians. Ollie's needs someone to cull virtual deer, and become the Big Buck Hunter Master. Ollie's needs someone to decide the playlist on the juke box. Ollie's needs someone to be there when the kitchen makes too much food and they want to give it to a regular. Ollie's needs you. Ollie's needs you in your Flightsuit, in your FIT Shirt, in your Eng Jacket and in your EngWear to show the rest of the school that engineers have a life.

SO GET OUT THERE AND MAKE IT YOUR BAR.

Archi-...what?

Alice "Firecrotch" Fernandes
-ACSE II-

Archi-what? I know that's exactly what you were thinking when you asked what program I'm in, don't even lie. You pretend to know what it is, but you really don't. I can see through you and that confused look for 0.37 seconds, and then you try to hide it. See, the thing is, the name of my stream is so friggin long that us ArchEngies just get lazy and say Arch-Eng. And then as a consequence, people think we're artsies, which we're not. Well, most of us are not. That's why we're in engineering anyways.

books because we don't really have much choice. But wait, this is just in the second year. What about the first? Why can't we take something easy like Film Studies or Sociology? I'll tell you why: because they have replaced electives with Intro to Architecture (ARCH1000), History of Structures (ARCC1202), and Architecture and the Environment (ENVE1001). Those three courses pretty much make our first year schedule full, as well as unique from any other stream.

Want to know what makes us even more special? We are one of a kind. That's right; we are out of this world, off the beat. We are the only ones in Canada. Our stream is unique in this humungous country. Only Carleton has the pleasure to have us as students.



The name is Architectural Conservation and Sustainability. Pretty much a tongue twister for someone whose first language isn't even English (i.e. me, the immigrant, but it's okay, I can't Pork-n-cheese either). Architectural Conservation and Sustainability: What is it? We all know there's obviously architecture stuff and things, but what is this Conservation crap? In a nutshell (and I say this to a lot of confused people), we are tree-hugging, somewhat-artsy civils. We take CIVE courses, we take ENVE courses, and we even take a couple of MAAE on top of ARCC and ARCH. Our purpose is to restore old buildings and make them more sustainable.

But why do we have so many damn courses? Shouldn't architecture and civil be easy? Eleven courses to take in your first year of university shouldn't be normal. Twelve in second year maybe, depending on your stream. But we don't even get electives until fourth year! The choice between Engineering Geoscience (ERTH2404) and Foundations for Environmental Chemistry (CHEM2800) don't even count as electives in my

To add to our awesomeness, ArchEng is probably the only Engineering program at Carleton consisting of a high girl-to-guy ratio. WHAT? More girls than guys? Is this even possible? Well yes it is, my friend. This is why there are more girls in your calculus class than you expected. Be thankful. Love us. You know you want to.

We ArchEngies are pretty tight. Having pretty much the same schedule in our first year, we had a lot of bonding time. We pretty much know most (if not everyone) in our stream in our year because we are such an awesome little group (maybe not as small as EngPhys, but no one can handle the 7 of them anyways). We're all friends, we help each other out with assignments and homework, as every C-Eng student should. We play Dutch Blitz at Leo's on our breaks and sit together and doodle in boring classes. We study together, we work together, we party together, and we be awsum togetha.

NEWS

I'M STILL REPPIN' THE DREAMCAST



The Great Console Debate: Which Will You Buy?

André Riel
-AERO III-

Sony's Playstation 4 and Microsoft Xbox One (or what disgruntled gamers have less affectionately come to know as the XBone) have been the talk of video game multiplayer servers and YouTube videos for months now. The question that comes up in every conversation is, "Which would you/are you going to buy?" When the XBone was first announced (and given that name), many people felt the PS4 won hands down. Microsoft's proposed restrictions on sharing and renting games and the need to connect to the internet once a day to operate the Xbox One were real sticking points for a lot of gamers (even if it wouldn't affect them and just pissed them off out of principle). However, both of these have been recanted due to backlash, so now the two consoles are much more comparable. So what are the existing differences?

First, the biggest lack of difference is gaming horsepower. The two consoles are fairly similar in computing power and visual capabilities. The best example of that is that they both have 8-core CPUs and video cards made by AMD. They also both come with 500 gb hard drives, which isn't actually as big as it sounds, considering you will now have to install all games that you play, unlike past consoles. So when it comes to which will be better as a gaming console, it is more a matter of preference. This leads to one of the big sticking points in this debate: the price.

Despite being quite similar to the casual gamer (which will be the biggest part of the market), the PS4 comes in at \$400 while the Xbox One will cost \$500. However, the Eye (Sony's motion capture system) is not included as a mandatory part of the system, while the Xbox Kinect system will come with even the base Xbox One. So for those that don't have interest in using the motion capture capabilities, the PS4's lower price tag is quite an enticing boast. Furthermore, the Xbox One requires the Kinect to be active when you play, even when you are not using it. Thus, for you schizophrenic gamers, the fact that Microsoft will be watching your every move with their HAL 9000-like device might give you reason to save your money and your sanity by sticking with Sony.

Another thing to take into account in the Great Console Debate is what games you want



to play on your new console. Microsoft has already boasted and unveiled some new Xbox One exclusive games that are sure to interest many. *Ryse: Son of Rome* and the reboot of my favourite SNES game, *Killer Instinct*, are two games that will only be released for the Xbox One, both of which have really grabbed my interest. Sony on the other hand has excited the gaming world with something that is fairly new to console gaming: free-to-play games. For those that haven't played any free-to-play games, at first they may sound like second-rate games made by bored gamers in their basements. However, free-to-play games are a surging trend in the gaming world and Sony has made a wise decision to ride in on its success. *Blacklight: Retribution*, an online multiplayer first person shooter from Zombie Studios which has had huge success in PC gaming, will be featured on the PS4. Not only will it be a free game, but you will also not need to have a paid subscription to Sony's new PS Plus (which will be required to play multiplayer mode in games like the "new" *Call of Duty*). This means you can have hours of headshotting, n00b pwning fun without

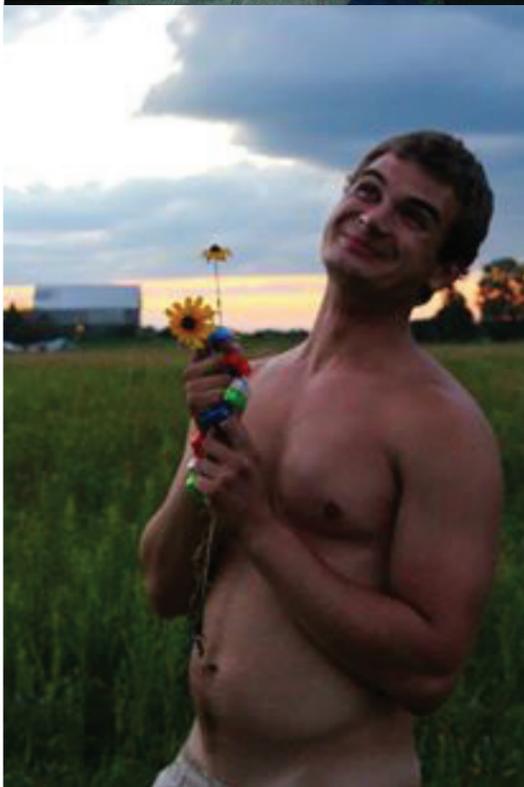
any extra costs (other than an internet connection with a higher cap, considering how much you'll probably use up). Side note: if you somehow aren't bored of *Call of Duty* yet, *CoD: Ghosts* will be available on both consoles, so no issues there.

Finally, please don't pick the Xbone because you have a 360 or the PS4 because you have the PS3. Customer loyalty is just giving excuses to companies for not giving you what you want. I promise you that Microsoft and Sony don't love you; they love your money, so make them work for it. What it comes down to is what is most important to you. That could be price, games exclusive to each console, or preventing the man from watching you as you do inappropriate acts while playing your Japanese anime games (not that I'm mentioning any names *cough* Tentacles *cough*). You should get the console that fits your priorities. And if you are like me and don't plan on buying either console... why are you even bothering to read this article? Go read the boob article; it would be much more interesting to you.

GALLERY



GALLERY





COLUMNS

LISTEN TO THE ISLAND BREEZES, MON

Stress and Time Management for Dummies

Ben "IED" Sutton
-MECH III-

Hello fellow C-Engers new and returning. I am writing this for all of you first years that are coming into engineering fresh out of high-school and are probably still in the midst of your frosh week high and or the resulting froshitis. You've probably heard a million times from parents that university is hard, full of sleepless nights, stress, and ramen. While this is true, your experience will be completely dependent on the attitude that you approach it and the coping strategies you use.

Stress and time management are closely related. If you can't do one then you can't do the other. Some people have great time management and are wound so tight they snap. Inversely some people deal well with stress, relax too much, and eventually fail when they manage their time poorly. Ultimately there is no set way of doing this so I will point out a few pitfalls and strategies where people have failed and succeed in the past. Keep this in mind, come up with a plan and your year will be much more enjoyable.

Self discipline and motivation: In a nutshell, this is the ability to regulate your own actives and stick to your well laid plan without being held accountable to it. This is university, your parents aren't there anymore and the only person who is going to kick you in the ass and make you do anything is you. People are creatures of habit and the best way to maintain self discipline is a schedule. Once you have one, force yourself to stick to it and keep going no matter how rough is gets. I guarantee that once you let your routine start to slip, things will only get worse as it becomes easier and easier for you to give up and quit on things. Once you start to loose motivation and commitment, it is nearly impossible to regain it.

Planner: If you don't have one, go to the CSES office (2090 Minto Center) and get yourself one of the cool C-Eng planners, read the shit out of it and use it to mark down everything. Remembering when tests, assignments, midterms, and any other kind of appointments or due dates are, is critical information. Once the workload increases, you will begin to forget things and work will start to pile up. Being able to see when work is due, far in advance, helps you better prepare and eliminate the backlog before it occurs. If you see you have 5 assignments, 2 labs and a test next week, you can start working on it now, prepare in advance, and ultimately prevent a lot of un-needed stress and anxiety.



Take the initiative: As Sun Tzu said, the best defense is a good offense. You do not want to be on the defense in engineering and be attempting to keep up with the treadmill as it were. Go on the offense, seek out work and complete it when you have energy and motivation to do so. Choosing the time and place to do work will give you a tremendous mental boost as opposed to sitting in a study hall feeling powerless to keep up with your work load. It takes a lot of self discipline and motivation to do this, but will greatly reduce your stress and anxiety throughout the year.

The Internet: I might as well be the first to break the cold hard truth to you. Video games and studying are not conducive to each other. That weekend you spend playing farmville instead of doing 3 lab reports will be one your most regrettable decisions this year. If you are an avid gamer, accept the fact you have no spare time, say goodbye to your un-employed LOL buddies and delete it forever. I cannot emphasize enough how easily games, reddit and youtube can ruin your school year.

Work out and eat healthy: Again it seems cheesy but going to the gym and eating a balanced diet can help immensely with time management and your school work. Staying fit keeps you from getting sick, helps you sleep better, relieves stress, and leaves you feeling more mentally focused. If you're not the gym type, check out some of the fitness classes or intramural sports at the fitness center. Yoga, soccer, ultimate frisbee, dance classes, and martial arts are all available. Go check it out

and find something you're interested in, oh, and eat a freaking vegetable once in a while. (BTW there is even a class where you learn how to use freaking swords!!!! How badass is that?!?!?)

Make friends and get involved: I know we're in engineering but you are not that busy. Check out and get involved in the many engineering clubs and groups like GNCTR, CSES, Formula SAE, Leos lounge and flight-suits. (Ask any upper year) Doing these kinds of things is great as a social activity and helps you get out, party with, and meet fellow engineers. Your friends will be your biggest key to success as you can help each other to learn and overcome challenges that may well be bigger than yourselves.

Relax: Seriously just chill out. Sometimes the best way to deal with stress is to know when not to stress out and just let loose. I'm not saying you should spend your weekends hung over; however there is a time and place for everything. This is university after all.

Jobs: If you have a job that takes up more than 12 hours a week, the money will not be missed. The free time will. Having done this myself, the only advice I can give is to make a schedule, stick to it religiously, and follow all the techniques I laid out above. Also be prepared to set priorities and cut a few things loose if it gets to be too much after a while.

COLUMNS

GIRL POWER



The Women Who Changed History

Trevor "Deepthroat" Irwin
-MECH V-



Women rock; not only are they hot and sexy, but lots of them get naked and post all their pictures on the internet! And some even sleep with me! (for affordable rates). But they are not appreciated for their sacrifices. This is why I will be writing monthly articles highlighting some of the most talented, ruthless, brilliant women who made a lasting impact on the world.

FIGHT FOR MOTHER RUSSIA! The rallying cry calling all Russians to defend the motherland from the Nazi aggression. What is often overlooked is nearly 800,000 women fought the Nazis alongside their male counterparts, braving sexism, combat and ridicule to produce nearly 200,000 decorations and 89 Heroes of the Soviet Union. These women were pilots, snipers, machine gunners, even tank crews. I mean a woman who could crush the Nazis and fight Communist bureaucracy at the same time deserves respect. None demonstrated this more than Marina Raskova.

Marina became the first woman navigator in the Soviet Air Force, and the first woman instructor at the pilot academy. So when the Germans invaded she wished to bomb them to hell. However like many things in the Soviet Union, equality was merely some words on the Constitution. Women were technically equal in all things, however, bureaucratic red tape meant none of them were truly enlisted let alone posted to combat theatres. But by 1942 after the disastrous casualties incurred by the German offensives, operation Barbarossa and operation Typhoon, Stalin was desperate for man power to halt the Wehrmacht. So Marina marched up to Stalin and demanded that women be allowed to form air units. These units had all women pilots,

ground crew and engineers. Three units were formed and became the first women to fly combat missions; the 586th fighter regiment, whom produced the only two women aces in history, Lydia Litvyak (12 kills) and Katya Budanova (11 kills); the 46th Taman Guards Night Bomber Regiment, known as the Night Witches flew 24,000 of the estimated 30,000 combat sorties women flew; and 125th Guards Bomber regiment which was commanded by Marina until her death in combat.

The other way women were extensively used was as snipers; Soviet command considered women to be ideal snipers, small, patient and deliberate. Lyudmila Pavlichenko killed over 300 Germans herself and was one of the first women accepted to the infantry. Women also comprised a large number of partisans, disrupting German supplies and communication. The most famous is Zoya Kosmodemyanskaya and 18 year old high school student who volunteered in a partisan unit. Captured in November 1941, she was tortured by the Germans but never gave away her comrades didn't even give them her true name. She was hung November 29, 2941 allegedly declaring before her death "There are two hundred million of us, you can't hang us all." She became the first women Hero of the Soviet Union.

These women proved they could fight just as well as men and earned the respect of their comrades. Smart, sexy and deadly as all hell; they truly showed what a woman could do.

fun. in the Sun

Jake "Treehugger" Lipohar
-ACSE II-

Wait, what? Yes. Wu-Tang Clan opened for FUN. this summer at Bluesfest. And it was awesome.

As we patiently wait to hear our favourite East Coast rap group of the 90's, a lone DJ appeared and began to scratch up a storm. The crowd went nuts and within a few minutes the whole crew was on stage and hitting their lines with all the rage and teenage angst you would expect. The whole show was tight, despite the majority of the crowd being pasty white wannabe's (like me) that only knew an average of three songs. But it was a really cool experience and I'm glad I was able to be a part of it. Shout out to my man ODB! Also, Wu-tang decided to cash in on their fame and spend an extra 30-40 minutes on stage, severely reducing the time that some follow-up country singer had. I found this fantastic.

Waiting around for FUN. to start, a group of us Carleton Engineers started making our way to the front of the crowd. And boy, what a crowd it was. It was just girls everywhere. And since I'm a solid 6 feet tall, my view was rarely impeded by the thousands of 5'5" concert goers around me. To add to the displeasure of the 'shorties', the group of us started belting out the Engineering Hymn and all of the anti-Ottawa U chants we could remember. However, a couple gee-ges got tired of how great we were and told us to "Shut the f@€k up." It was a blast. The young women and their mothers were not very pleased though, with one of the mother desperately protecting her daughter from 'how big I am' (I only weight a hundred and fifty pounds woman! Go feed your girl a steak or something and stop complaining). This went on for a while, and Izzy brought us popcorn so it was a pretty rad evening.

Soon enough the show was beginning and it began with a group of men dressed in tuxedos, all singing some long and drawn out melody. It was actually pretty cool, but I debated on whether or not I would enjoy it. The performance was filled with fantastic lights, sexy stripping, colourful balls and a few songs that I knew the words to. Nathan totally killed his vocal parts and the rest of the band rocked hard on their pianos and guitars. Three quarters of the way through, the band stopped to explain that "[Bluesfest] is the largest show they've ever played." The crowd absolutely loved their brutal honesty. Everyone screamed for what seemed like an eternity. FUN was in utter shock at what was happening to their history of small-time performances. The crowd literally screamed, yelled and chanted for over ten minutes. Having this many people chant and scream and give out all of their energy literally put a halt on the band. Nathan was in tears, and it was probably the greatest musical experience I've ever had. I now have a new appreciation for artists that may be more mainstream than what I'm used to. This was honestly such a spectacular performance that I would have gladly paid full price for. But you never really know what you're going to get at Bluesfest. You just have to pick up that bracelet and find out!



COLUMNS

OH SNAP, THAT TITLE'S 100% LATIN

Daemonium Ex Machina - Part One

Gilles "Nightstalker" Messier
-B. ENG 2013-

The halls were dark in the engineering building, the floors still wet from the janitors already come and gone. By now they would be slumbering soundly, their day's work done. Alas, my labors were just beginning, for our profession - like that of polar explorers - makes no distinction between night and day. It was on nights like these that I cursed my choice of vocation; had I any sense, I would have opened a coffee shop on campus and retired early.

The glass cube of the computer lab glowed at the end of the hall, bathing the floor in a sickly yellow light. At the end of the hall, a lonely strip of light shone beneath a door - Professor Ferguson's office. The old man was burning the midnight oil, though God only knew on what; he had not published a paper in decades. Nor, really, did he need to. He was a permanent feature of the institute, as inextricable as the ivy that crusted the stone walls. If anyone dared disturb this ancient creature in his natural habitat, the environmentalists would picket in the quad.

I cursed under my breath. Ferguson was the last man I wished to see, for it was for his course that I made this eleventh-hour expedition. Alas, there were no other routes to the lab, so I pulled off my shoes and crept as quietly as I could down the corridor, ears pricked to catch the slightest sound. Nothing stirred; Ferguson had probably nodded off - or, just as likely, shuffled off. Not wishing to find out which, I cleared the glowing threshold and padded silently onwards.

Then, triggered by that inscrutable sixth sense that seems only to come with old age, a wheezing brogue shattered the silence.

"And just where're you off to, Mister Atkinson?"

I winced and turned slowly round as the door creaked open. Ferguson, seated at his desk, had not raised his eyes from his papers.

How did he...?

"Just...going to the lab," I stammered, flashing an awkward smile.

"Didn't know it was mosque as well," said Ferguson, glancing at my bare feet.

"Sore feet," I lied.

Ferguson made a deep rumbling sound, like an engine filled with gravel turning over.

"Well," he said muttered, shuffling his papers. "If I see any sloppy work on that assignment tomorrow, I guarantee more than your feet will hurt."

I stood in the doorway for several long moments, stunned.

How did he...?

The scratching of Ferguson's pen suddenly stopped. His cold grey eyes flicked up, boring into me from behind half-moon spectacles.

"Well, get on with it then," he snapped.

"Yes, sir," I sighed, defeated, before loping off towards the lab.

But as I turned, something flickered across the craggy moonscape of Ferguson's face.

A smile.

Suddenly emboldened, I returned to the doorway.

"Don't tell me you never pulled a last-minute all-nighter," I said, rather smugly. I don't quite know what possessed me to say it; sleep deprivation, more than drink, can make you do strange things. Ferguson, however, merely furrowed his brow.

"Never," he grunted, still staring at his papers. He could not, however, hide a faint smirk.

"Get to it," he repeated. "And next time, make sure you take someone with you."

"What?" I said, rather confused by this apparent non-sequitur.

"For safety," mumbled Ferguson.

"I'm sure I'll be alright, Professor," I scoffed. "It's not like a computer can hurt me."

"Oh really?" said Ferguson, haughtily planting his hands on his hips. "Well, Mr. Atkinson, I have it on good authority that they can."

"Really? And whose authority is that?"
"Mine," said Ferguson.

I could scarcely believe what was happening. Among the faculty, Ferguson was a legend. Rumors abounded about his life, said to be colorful enough to fill several novels. But of this storied past he spoke not a word; to all around him he remained inscrutable as a sphinx - a cantankerous sphinx every student knew well to avoid. Yet now, with this playful banter, I was being inducted into what must have been a rarefied circle of confidants. I couldn't imagine why; perhaps the late hour - or that bottle of 50-year-old scotch he was rumored to keep in his desk - had softened him up. Whatever the reason, I knew an opportunity when I saw it.

"Do tell," I said.

That was all it took. With a hearty chuckle, Ferguson set his papers aside and beckoned me to sit down. Before my eyes, the crusty curmudgeon was transformed into a jovial old man, brimming with life. Leaning back in his chair, he folded his hands behind his head and stared wistfully at the ceiling. There was a long pause; I could almost hear the dusty relays and valves humming to life as old memories long filed away trickled to the surface.

"Now," he began at last. "You students have some notion that I'm some sort of dinosaur who hobnobbed with the likes of Watt and Brunel, but I'll have you know I only started at the University of Glasgow in seventy-three! We were a fresh-faced, bright-eyed lot back then, I can tell you. We'd all seen Apollo come and go, and were rearing to get a piece of the action. But even back then you had to start with the basics. I remember in sophomore year we had this infamous Structural Analysis course. Fiendishly difficult course, that was; they said if you could pass that, you could damn well take anything University could throw at you!

That course was taught by one Professor McRae, and he had a reputation that would put the fear of God into you. I'd seen students

COLUMNS

SIPPIN' THAT HATORADE



Daemonium Ex Machina (cont'd)

coming out of his final examinations looking so pale you'd think they'd seen the Devil himself. I'd like to tell you that everyone tried to avoid that course, but only McRae ever taught it. He was old guard; he'd worked on the Blue Streak missile back in the 50's, and was an undisputed guru of aero structures.

I'll always remember the first day of Structures, waiting in the lecture hall for the professor to arrive. Those of us lucky enough to have been warned about McRae didn't chat or smoke; we just sat in our seats, hands folded, eyes forward. We tried to pass the warning on to the others, but they didn't believe us and kept fooling around like they always did. At precisely one o'clock to the second - I remember timing it on my watch - McRae came storming in. I can still see him now: he was a small, nasty-looking man, with a scraggly little beard and these watery red eyes like he'd never gotten a wink of sleep in his life. Despite the warnings, the other lads kept fooling around as McRae came in, and I braced myself for fire and brimstone. Strangely, though, McRae didn't say anything; in fact, he barely seemed bothered at all. He just started up and down the aisles, handing out photocopied pages. I remember thinking maybe he wasn't as bad as everyone said, and that the upper years must have been pulling our legs.

But you see, those papers were those blue Banda copies - the ones that smelled of alcohol - and a few of the lads couldn't resist having a good, long sniff. As soon as they did, quick as a flash McRae wheeled around and just opened up on them like an artillery barrage.

"You, you, you, you," he barked, eyes blazing and mouth foaming. "Out! Now!" Good God did they ever run for the hills! But that was his system - his test. Naturally I assumed those lads would be back next lecture, but it turned out that McRae had kicked them out for good. Since you couldn't pass engineering without Structures, they ended up going all the way up to the Dean to appeal the decision. McRae did eventually let them back in - the following year. If there were any doubts about McRae before, I can guarantee you there were none after that day!

"As for the rest of you," he finally said, scowling like we were the foulest muck he'd ever scraped off his wellies. "This is your first assign-

ment. You are to produce a complete stress vector field of this structure under the indicated loading, at millimeter precision."

I remember looking down at that paper and feeling my blood run cold. It was a fiendishly complicated section of missile fuselage - Blue Streak, most likely - and just looking at it, you knew it would be a nasty bit of calculation. A month's work, at the very least.

"You are only permitted to use this," he said, holding up his slide rule. "When we built Blue Steak and TSR-2, we didn't have any of the fancy gadgets you all seem so fond of. This is the tool of the true engineer; it was good enough for us, and it's sure as hell good enough for the likes of you. Do I make myself perfectly clear?"

At that point, none of us were overly concerned; all we ever used anyway were our trusty slide rules. Digital calculators were brand new and damned expensive. I remember there were a few rich kids who had the first Texas Instruments SR-10s, and they used to strut around campus like cowboys with these bulky things strapped to their hips. Anyway, the assignment was tedious, but nothing we couldn't handle. Then McRae dropped a bombshell.

"The assignment will be due one week from today," he said. Then he turned to the blackboard and launched right into his lecture.

I don't think any of us caught a single word of that lecture; we were all in a daze, positively shellshocked. To look at us you would have thought we'd all been condemned to death. They say engineers can do the impossible, but this assignment from the depths of hell itself; even a quick estimate told us it was nigh undoable, even if our schedules had been clear. But of course we all had a half-dozen other courses and assignments to contend with. I'm sure every man there wanted to protest, of course, but you learned quickly that in McRae's class, there were no excuses. He'd have gone to your deathbed to pry an assignment out of you before you clocked out. One time, some poor bastard came to the lecture late, hobbling in on crutches.

"Pity you're not a horse, Mr. Bell," said McRae. "I'd have had you shot!" Then he kicked him out.

Program Review: PAPM

Paul Benoit
-CompSci II-

How can you tell when a politician is lying?
Whenever their mouth is moving.

In no other faculty, dear reader, will you learn to say so little in so many words as in Public Affairs and Policy Management. Don't worry though, the thousands you pay learning a wikipedia's worth of useless information will be repaid tenfold in taxpayer dollars when you're using it to avoid answering any real questions or concerns at your indictment!

Have you ever wanted to sound smart quoting dry analysis on neo-colonialism or the Pacific economy? Have you ever wanted to use the phrase 'normative good' without a hint of irony? Then do I have the program for you: That's right, drop your calculators and pick up a copy of The Communist Manifesto!

Your Bachelor's degree will be spent learning to examine a wide variety of issues facing society today, and then hire the right people who actually have the practical knowledge to solve them. Don't forget to suck up to the right politicians on the way though, otherwise you might find out just how much of the job is knowing the right people who can pull you out ahead over other potential job seekers with things like 'qualifications' and 'innovative thinking'. Afterall, what's more important: what's good for the people or who you play golf with?

Things you'll need to get started:

- A courier bag
- Dress clothes
- Approved politically correct books (to decorate your shelf)
- Unsourced Opinions (and weasel-words to back them up)

Editor's Note:

The opinions of The Iron Times' columnists are - in no way - related to the opinions of the editors, or the Carleton Student Engineering Society.

That being said, those smug, little PAPM bastards do overdress.



COLUMNS

~~NO ONE~~ EVERYONE LIKES A GOSSIP

Home, sweet home

Or: Why my summer work term was WAY cooler than yours!

Leah "Tweedle-dum" Morrell
-MECH V-

To start it all off, my summer work term was in Alberta. I am from Alberta. Alberta is cool. We have mountains (real mountains, not the ones you pretend are mountains), and mountains are cool. If you are in Calgary, you can drive to the sweet mountainous city of Canmore in only an hour, or 45 minutes if you drive like an Albertan. You know what's even cooler than mountains? Lakes in mountains are cooler. I got to experience all of this, and more, because I lived in Alberta for the summer! Also, you get to go to the Calgary Stampede and, for people of the legal age of 18 (yeah, you don't have to go to Hull!), it is essentially a 12 day drinking event in which you get sun burnt, rained on in torrential downpours with hail, and wear a lot of plaid.

Another reason why my summer work term was cooler was because I had an engineering job! I worked as a summer engineering student in the project development group at a pipeline company. On a serious note, this was a pretty incredible opportunity. I had the chance to look at real-live engineering drawings, reports, analysis, and the like, which I aspire to one-day produce.

The next coolest thing about working in Alberta, especially in the Oil & Gas industry, is that, they have money! Whether that is money to hire summer students, money to pay the summer students, money to go on sweet work trips, or money for company parties, it's a good time!

Another thing I will brag about in more detail is the chance to go on work trips on Thursdays. See, my group was building a 242 km, 42 inch pipeline through central Alberta. So! Obviously we would have to spend \$6000 on a chartered flight every Thursday and \$5000 on a helicopter tour every second week! We also had to eat on company money and drive around to look at stuff and nod like you understood what was going on. Benefits of these adventures included: free food, paid naps, and lots of bonding with co-workers. But really, it was one of the coolest things that I got to do. If you ever get to do in field work trips, I highly recommend them, because all of the jibber-jabber that you don't un-

derstand sitting at your computer will make SO much more sense when you see it happening in person.

All in all I had a pretty sweet summer. I got to see my friends from home, spend some challenging times with my parents, and got to work for a pretty sweet company. And in all seriousness! If you are finding that you're struggling to find co-op work for next summer, consider applying in Alberta. There are tons of co-op student opportunities all across Alberta, and we are all pretty nice people (except when we are driving, watch out!)

Hot Piece of Summer

Antish "Humpty-Dumpty" Gopauloo
-ENVE II-

While some of us were busy making our own scandals, some celebrities were doing their usual thing:

KIM KARDASHIAN's DRAMATIC DELIVERY

Rumour has it that the American television personality, Kim Kardashian, 32, gave birth to her baby girl. Three weeks earlier than the due date. Needless to say, Kimmie went into a panic attack. On June 14, the fussy star, who was only 37 weeks pregnant, went into premature labour due to complications. Baby daddy Kanye West immediately rushed to her side, straight from Europe. Now that the baby girl is born, Kim is trying to shed her huge ass weight, post baby birth, all while contemplating marriage. Good luck on that Kimmie, because it is obviously a #firstworldproblem.

ROYALLY GEORGE

It's a boy! Prince William's wife, Kate, has given birth to a boy, a child now third in line to the British throne. The boy was born at 4:24pm on July 22, at St Mary's Hospital in Westminster, UK, weighing 8 pounds 6 ounces. The Duke and Duchess of Cambridge have named him George Alexander Louis of Cambridge. The Queen, who has not been in her finest shape lately, was delighted with the news. However, I highly doubt Camilla, Duchess of Cornwall and second spouse (once the mistress) of Prince Charles appreciated the news, especially since there have been conflicts between Kate and her, as Camilla wanted to be Queen after her Royal Highness, Queen Elizabeth

II. Now that the Royal Baby is born, Camilla's dream of becoming Queen will remain a dream. Also, Poor Harry, his tiny, few weeks old nephew moved him back to being forth in line to the British throne. Baby needs to watch out. If Harry goes rogue and joins forces with Camilla, I bet it will be an epic royal showdown. #worthwatching

WHY IS HE STILL EVEN ALIVE?!!

Justin Bieber has given his fans a lot of things over the years, but a mouthful of saliva isn't one of them. Last week, the 19-year-old singer made headlines when TMZ posted photos of the star spitting over a balcony in Toronto, Canada, along with pictures of a group of Beliebers looking up at him from the sidewalk. Now that he is broken up with Selena Gomez, it looks like he is trying to look ruthless, poor thing! Every time he tries to be a tiger, he just comes off as a stupid kitty cat. #HahGay!!

BITCH CRAZY

It has been confirmed recently that American actress, Amanda Bynes, has gone cray cray. It all started with her stupid tweets to Drake, famous rapper, sometimes calling him ugly and sometimes professing eternal love for him. She also attacked Miley Cyrus, calling her ugly and later apologizing to her, calling her pretty. However, recently, Mandy went completely overboard, when she set an old lady's driveway in L.A, on fire. She was arrested and the police department decided that they had grounds for sending her to a mental institution. Mandy's parents, who are both in their 60's, have decided to ask for the legal conservatorship of their daughter, so as to keep more restraint on her. However, her 48 hours in the mental hospital has been extended on request of Mrs. Bynes, for 30 more days so that the meds Mandy has been put on can take effect. In fact, Amanda Bynes faces early schizophrenia diagnosis, a mental disorder in which is a person struggles to distinguish between reality and fantasy. Well it's about time she gets the help she needs, especially since she soaked her pet dog in gasoline and wore a horrible blue wig to her trial. #GetWellSoon-Mandy

COLUMNS

FINALLY, SOME APPRECIATION



Call Sign Conundrum

Caitlin Hart
-JOUR II-

I dub thee Brown Panda, or Birdbath or Nightstalker or any of the other various call signs out there. Similar to what they have in other cultures in which they have a naming ceremony, engineers at Carleton are given what is called a call sign.

Of course anyone reading this is like “Yeah tell me something I don’t know”. Okay, challenge accepted. To us on the outside of this tradition when we hear you guys calling each other names such as “Ikarus” or “Over flow” we think it’s just a silly nickname. Boy was I wrong.

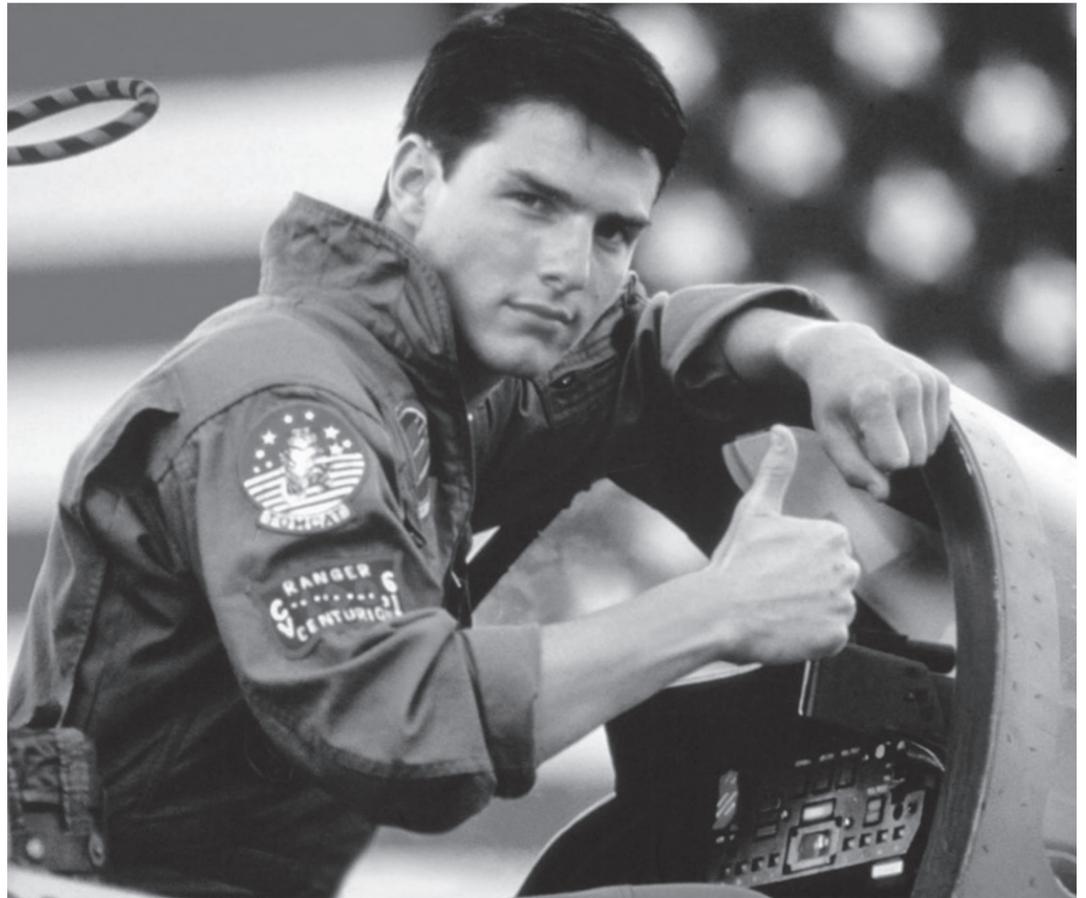
So from my understanding as a lowly artsy, EngFrosh is basically designed to get a call sign and possibly get you arrested. It is beyond me how engineers get away with all the destruction they have caused throughout Ottawa. Although it does explain the several restraining orders that you guys have.

Honestly, for an arts student, well journalism actually, all this engineer culture is like living Lost in Translation, minus Bill Murray of course. So what I plan to do is become privy to engineering traditions and examine them from an outside perspective. Or more accurately explain to you guys why many of your traditions are a) not healthy b) not legal or c) just plain crazy.

How arts students could apply this: First we need something to generate call signs. We could wreak havoc on all the museums in Ottawa, me-thinks trying to steal pieces of art could be a challenge. For journalism students we could try to find the most absurd story and get it published.

Why it won’t work for arts students: We are too proud or lame. Most stories of getting a call sign require absolutely no shame, something that appears in high concentration in engineers and low concentration everywhere else. Also we’d have to organize something similar to EngFrosh to generate these names. Sadly organization is not a high priority in most arts programs....oops did I say that.

Should I try it: I have done some pretty stupid things without the excuse of EngFrosh, so I would be curious what my call sign would be. In short, I think the answer is yes. Hell, I could generate a call sign without meaning to and while being 100% sober.



Similar to: First thing that comes to mind is Top Gun, anybody have the call sign Ice Man?

Crazy Factor: Medium to high depending on what you did to get your call sign.

Fun Factor: Very high, to have an official nickname that everyone knows you by is pretty darn cool I have to admit.

Is it Legal: Debatable. Getting a restraining order from the Bay is pretty bad, not to mention getting in trouble in with campus security or by-law officers. Yet, no one appears to be serving jail time, so either you guys are clever or no one has mentioned this to me.

Is it Healthy: After hearing stories of engineers downing entire jars of jam, licking peanut butter off someone’s nipple or drinking copious amounts of booze, I’m going to go with no. How did you guys survive frosh? Seriously, you still have a liver right?

Shaw Bottom 7even

Jasmine “404” Shaw
-BMED II-

This month, I will be exploring with you the worst (or... best?) possible locations for public displays of affection (PDA).

These venues are not only highly un-conducive for sensuality, but performing some nasty body-thumping in any of them are likely to royally discomfort some innocent bystanders.

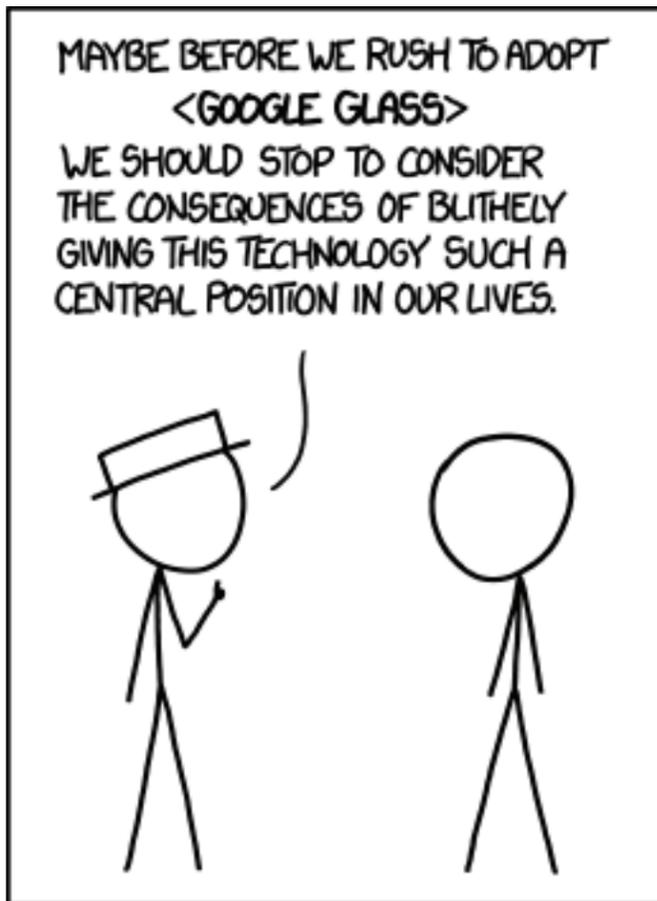
1. Church/Mosque/Temple
2. Flightsuit Keggers I through IV
3. Security at the airport.
4. In line for a welfare check.
5. Stuffing centre at Build-a-Bear
6. Dinner table at your parents’ house.
7. Front row of Glenn McRae’s class.



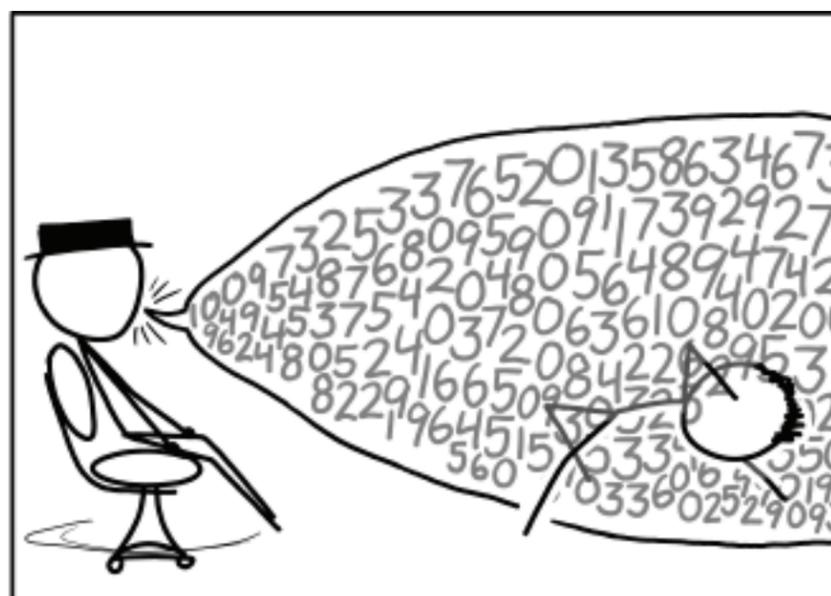
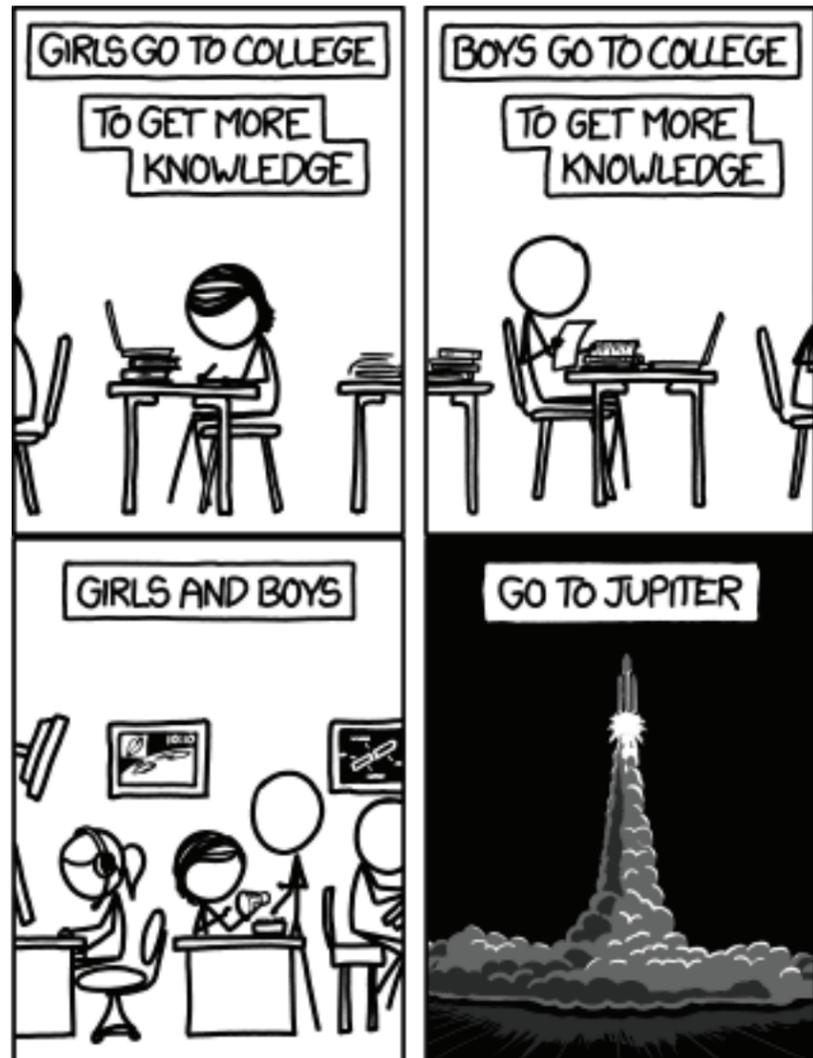
DIVERSIONS

#RANDALLMUNROE2016

XKCD



DON'T HAVE ANY INSIGHTS ABOUT A NEW TECHNOLOGY? JUST USE THIS SENTENCE! IT MAKES YOU SOUND WISE AND YOU CAN SAY IT ABOUT VIRTUALLY ANYTHING.



DIVERSIONS

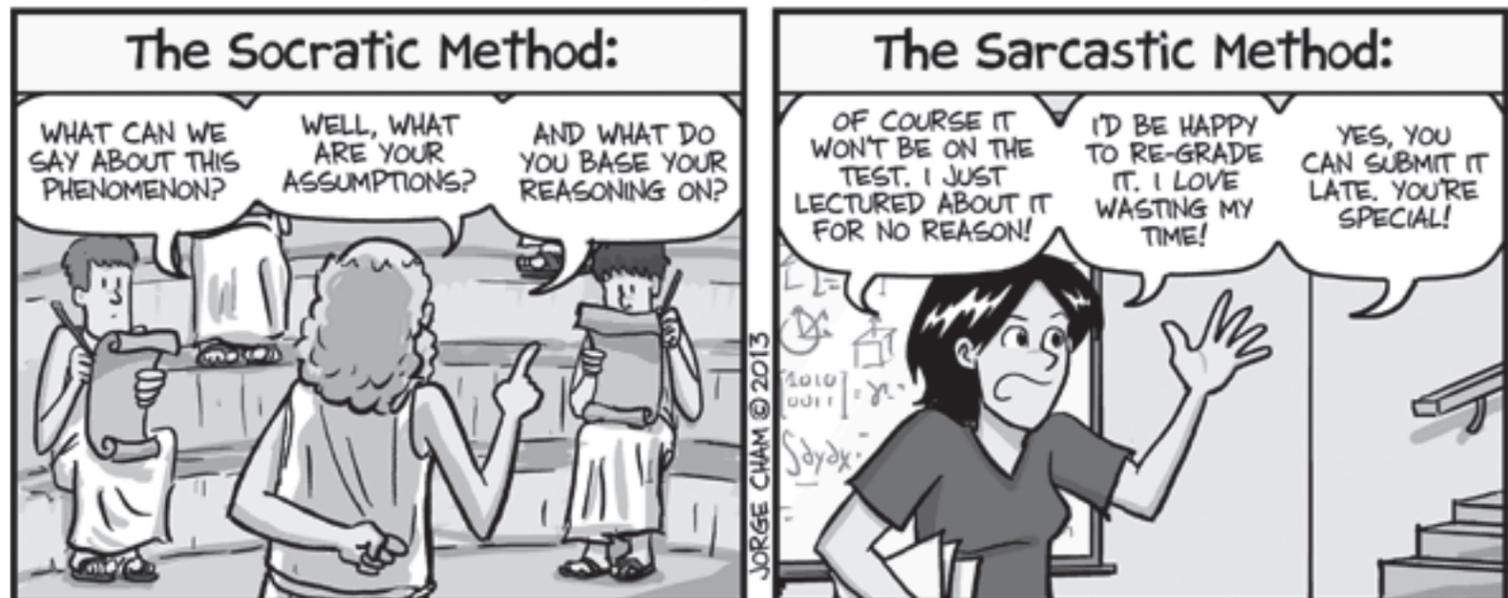
WE LAUGH TO KEEP FROM CRYING

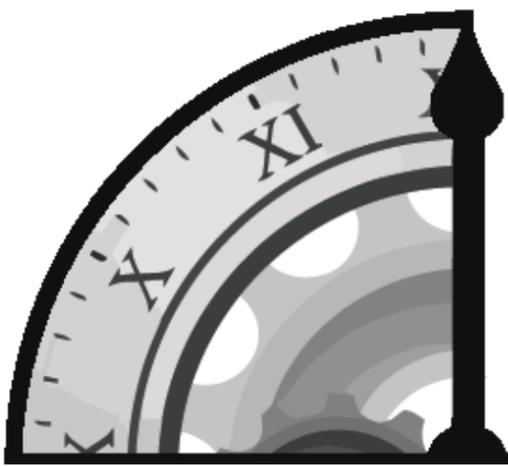


PHD COMICS



Teaching Methods





DIVERSIONS

UNBIASED HOROSCOPES FTW



SLEEPER OF THE MONTH

Brokebank Mountain

Flightsuit committee, pay attention! Your events are obviously too expensive if we are forcing our brethren to sleep in dirty boxes.



WTF OF THE MONTH

Everyone knows that one guy.

Easy jokes aside, I think I legitimately saw this happen at FSK III last year.



SQUEE OF THE MONTH

I needed to sire a child to feel manly after seeing this.

They're cute now, but wait until they grab their nunchuks!

HOROSCOPE

♈ ARIES

You'll come to the realization that most people just laugh at your jokes so you'll leave.

♉ TAURUS

You're not the biggest that she's seen... not even close.

♊ GEMINI

You'll discover that your great-grandfather was a very important man... in the S.S.

♋ CANCER

Ever heard of testicular torsion? Well you better Google it, and/or wear looser briefs.

♌ LEO

Consent is sexy! Remember that for your court date on the 21st.

♍ VIRGO

Ladies: Try a one-night-stand with a random (just to mix it up!)

Gentlemen: You're fucking welcome.

♎ LIBRA

Hope you have a good month! Remember: your parents probably do butt-stuff.

♏ SCORPIO

Glenn McRae will pick up your scent. Either roll in mud, or stand veeeery still.

♐ SAGITTARIUS

Oh snap! Somebody's getting turkey-dumped.

♑ CAPRICORN

Just keep being sexy, you horse-phallus'd Leviathan.

♒ AQUARIUS

Everything you've touched today probably has a thin coating of feces.

♓ PISCES

Maybe it's time to realize that you're not quite cut out for your program. I'm sure you can still get a job with a B.A... cough

COMING UP

STAY CLASSY, CSES



GREAT EXEC-TATIONS

This month, we asked your CSES Executives what they would like to see done in their portfolio this month that is innovative, novel, and progressive. Here's what they dreamed up.

PRESIDENT

MEL BLAINEY

Host a totally awesome-tastic President's Meeting with engineering club and societies; meet at least 200 first year students (OMG); AND make sure my super sexy council is having fun and doing a good job.

How can YOU get involved this month?: COME VISIT US AT 2090 MINTO! We are really friendly, we have books, we have fun events you can go to, we have ways to get involved, and we want to see your beautiful faces!

VP SOCIAL

CHRIS ZUBICK

Have at least 10 teams participate in the first official trivia night at Oliver's. Provide social events that first year students will be comfortable attending.

How can YOU get involved this month? : You can get involved by visiting the CSES website and checking out my open directorship positions or just stop by the office!

VP SERVICES

TYLER HOLMWOOD

How can YOU get involved this month? : Recruit and train all fall Leo's volunteers; improve Leo's training; run ad campaign for SGRC; get SGRC running smoothly; start looking at updating ELP; have the office looking good; not to catch anything after being thrown in the canal.

How can YOU get involved this month? : Eng-frosh!! And sign up for a volunteer shift at Leo's! You will be rewarded...

VP ACADEMIC

ADAM MIKOLAJCZAK

Plan McCoy's reno, textbook trade, planning NEW, catapult project?

How can YOU get involved this month? : Apply for directorships, volunteer at Leo's, go to events, join a team. Just put yourself out there.

VP INTERNAL

MICHELLE DAVIS

Win Frosh week, get Fall Elections done early, and have an awesome First Year Conference!

How can YOU get involved this month?: Go to First Year Conference (even if you're not in first-year... there will be pizza, what else needs to be said!) and apply for directorships! I heard VP Internal directorships are the best ;)

VP PUBLICATIONS

JASMINE SHAW

Win Frosh week, distribute the Iron Times to all 7 continents, acquire awesome directors, and go to class.

How can YOU get involved this month? : Write an article for the Iron Times, apply for some of my super awesome directorships, and say hi to me in the hallway! (I'm the short ginger kid).

VP EXTERNAL

ZAC BANDURA

Rep C-Eng at the two conferences I will be attending, open applications for NCWIE and PEO-SC, put the CSES logo on the moon and make sure all my directorships are filled.

How can YOU get involved this month? : Go to the First Year Conference to learn about all the cool stuff I will be offering you guys throughout the year. Apply for directorships and attend aforementioned conferences.

VP FINANCE

VANESSA LEWIS

Increasing funds for student group funding, looking into a frosh fund for the following year to help support more students to participate, and dealing with filling all of our taxes!

How can YOU get involved this month?: visit the CSES office where everyone there can help suggest ways to involve yourself!

THIS MONTH...

Sept. 2-8:
EngFrosh

Sept. 11:
SREE "Meat and Greet"

Sept. 12:
CSCE Meet and Greet

Sept. 14:
CMAS Vintage Wings Tour

Sept. 15:
EngBowl
Biomed Lab Coat Dying

Sept. 16-20:
Fall Election Nominations

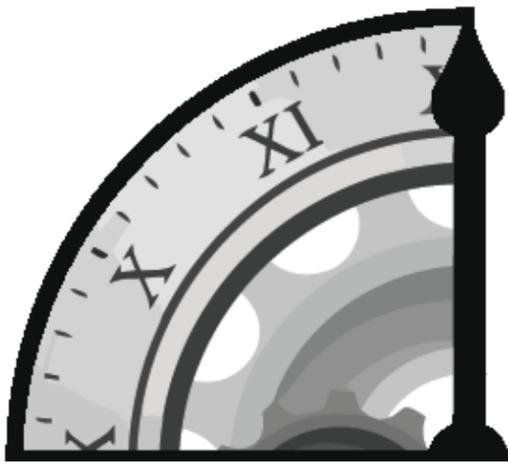
Sept. 19-22:
Homecoming Weekend

Sept. 23-27:
Fall Election Campaigning

Sept. 28:
First Year Conference

Sept. 30 - Oct. 4:
Fall Elections

**FOR MORE EVENT DETAILS,
VISIT: [CSES.CARLETON.CA/
EVENTS /CALENDAR.](http://CSES.CARLETON.CA/EVENTS/CALENDAR)**



COMING UP

TIP: IF YOUR BOAT AIN'T POINTY, IT'S A TANK

YOU EITHER SINK A FROSH...



OR YOU FLOAT LONG ENOUGH TO
SEE YOURSELF BECOME AN ENGINEER.

COMING UP

TIP: PICTURES OF JUSTIN BIEBER MAKE BOATS SINK



BUT DON'T WORRY, WE HAVE YOUR BACK.



YOU POOR BASTARDS... AVENGFROSH 2013!

LAST WORDS

AUF WEIDERSEHEN!

THE IRON MAN



Name: Gilles Michel Messier

Callsign: Nightstalker

Program and Year: B. Eng AERO A 2013

Hometown and High School:
Grant Park High School in Winnipeg, Manitoba

C-Eng Involvement:
Iron Times Contributor and Junior Editor 2007-2013;
Iron Times Editor-In-Chief 2012-2013; Lunar Rover
Project team member 2007-2010; C-Eng Musical Set
Designer, Prop Master and Writer 2011-2013.

If you could date one superhero, who would it be?:
Sally Jupiter, the original Silk Spectre from Watchmen
in her prime. She's a feisty dame who can hold her own
fighting crime in the male-dominated 40's.

What is your least useful skill?:
There are no truly useless skills, but the one that comes
closest is my ability to repair typewriters.

Theme Song:
Lawrence of Arabia Theme, by Maurice Jarre.

Your parting words for C-Eng:
Get in, get your B. Eng, and get out; instead of obsessing
over courses and marks that ultimately count for
very little, use your time at University to network,
forge connections, and gain a wider perspective on
engineering and life in general.

USES FOR THE CHARLATAN

- Read it in the atrium so everyone knows what a ~~uninformed piece of shit~~ complicated and unique scholar you are
- Wrap it around your fist for sparring practice in prison
- Gnaw it into tiny pieces to line your nest
- Wipe up the Game Day salsa which falls on your belly
- Strain pasta through it if you are short on proper utensils (Note: The pasta will taste like pretentiousness)
- Last-minute contraceptive device (Note: It is *very* dry)
- A coaster at Ollie's
- Burn as an offering to Glenn McRae
- Soak up the tears of job-searching Artsies
- Make paper air planes to throw off the parking garage because one of your Frosh Team members is a megalomaniac and won't let anyone else build the boat
- Combine with paste to make a papier-mâché friend... who never stops jerking off to CUSA's brilliant ideas
- Fashion into pads and equipment for our new football team
- ~~You can read it~~

WANT A PASSPORT STAMP?

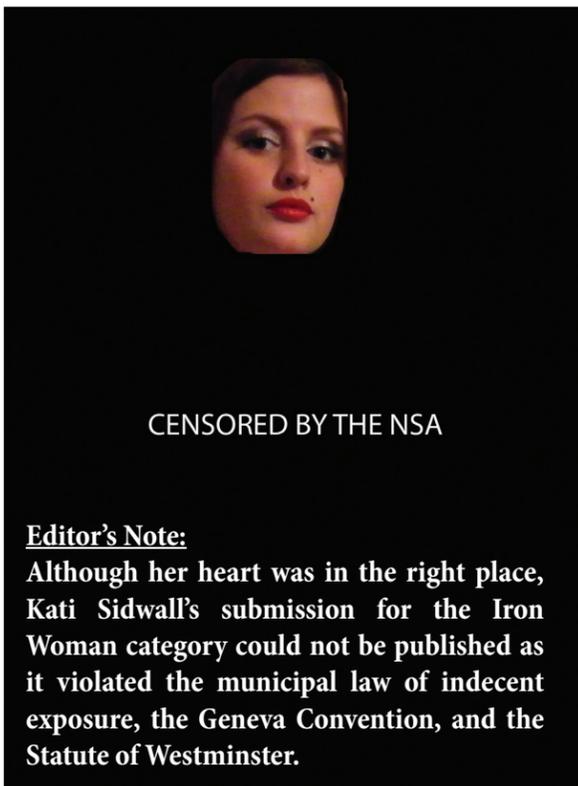
Become one of our columnists.

Just contact either Allan Bassi, or Jasmine Shaw (VP Publications), or make a special note that you want to start a monthly column when you submit your article.

Joining us guarantees invitation to prestigious soirées, and refreshing ale.*

*By this we mean a beer at a sports bar

THE IRON LADY



CENSORED BY THE NSA

Editor's Note:

Although her heart was in the right place, Kati Sidwall's submission for the Iron Woman category could not be published as it violated the municipal law of indecent exposure, the Geneva Convention, and the Statute of Westminster.

Name: Kati Sidwall

Callsign: Spicy Beaver

Program and Year: B. Eng SREE 2013

Hometown and High School:
Winnipeg, MB - Grant Park High School (fun fact; I
went to high school with Iron Man)

C-Eng Involvement:
EngFrosh Facil (once), Head (twice, and we won the
week both times... TIGERS AND PIRATES FOR
LIFE!), and Spirit; Leo's EngWear Director; SREE
Society VP Social; founder of the Carleton Green
Energy Symposium; founder of the Carleton
Engineering Musical; CSES VP Publications. And
I went to a party or two...

If you could date one superhero, who would it be?:
Scott Pilgrim. I would be thoroughly amused by
his slaying of my seven evil ex-boyfriends.

What is your least useful skill?:
My ability to identify typefaces on sight.

Theme Song:
Science Fiction / Double Feature from The Rocky
Horror Show

Your parting words for C-Eng:
If it really came down to it, C-Eng, I would eat a
Fuzzy Peach for you.