The Carleton Engineering Student's

VENA CONTRACTA

The News Beacon of the Civilized World

Volume XXIV, Issue VII | The "I'm Feeling Nostalgic" Issue | April Issue

Disclaimer

The *Vena Contracta* is the forefather of the *Iron Times*. It was discontinued over ten years ago, but we're bringing it back for an April Fool's edition. This newspaper is a publication of the Carleton Student Engineering Society and although they usually pick up our bill from lunches and stuff, the opinions herein are usually borrowed from the guy next door and are not the views or opinions of the society, the faculty, the dean, the custodian, the Leo's bums... well you get the point. In fact, most of our views may conflict with theirs, so don't go crying to them if you don't like something in this issue. Instead talk to our boss at irontimes@cses.carleton.ca.

We'd also like to say, that the spelin, grammar and humour contained herein are ours and ours alone, so you're not allowed any! Nyah nyah nyah! BUT if you want to help keep up the excellent quality of the almighty Vena Contracta, feel free to send us articles (yes it is a shameless plug for people to write us stuff).

For those of you who have been reading the Charlarag for the last eight months, you will now see what real engineers read. SO... Put down that trash, or see the end of the back of this issue for proper uses for it. The only time you should be seen with it in your hand instead of the Vena Contracta or Iron Times is when you have insomnia and need a sleep aid.

So now that everyone knows what is going on, if not here is the recap: If you don't like what is in the Vena Contracta, e-mail us. IF you want to write something for us, e-mail us. If you want to insult our reporting skills, or lack thereof, e-mail us. And never let a Mighty Vena Contracta editor catch you with a Charlarag.

Credits

The escaped mental patient we have as Senior Editor:

Nolan Hunder

The people locked in my basement acting as Junior Editors:

Matt Molkoski
Josh Newman
Gilles Messier
Bharat Bhaga
Caleigh Rutledge
Kristen Jerabek

Reflections Pleas for More Pants

Jordan Briggs
AKA "Crack"
Aerospace IV

I want to thank Adam, who stood by my side;
As we emceed the banquet, and jested with chide
Remarks about Eric, so swell and upbeat;
That he wouldn't shut up, or sit in his seat.
The Museum of Nature, that place we did go;
Your room had an echo and was whiter than snow.
That mattered not much, 'cause I had quite a feast;
Of veggies and wine and delicious roast beast.
I must now proceed, in Oscar-speech style;
With the long list of thank yous I tried to compile.
Thank you Miller and Johnson, for you are quite a pair;
I'll friend you on Facebook as you're popular there.
I'd like to thank Andrew, but don't think I will;
For icing us bros and making me spill.
I should also thank Council, from CSES;
And Suzanne my god you looked great in that dress.
Gracias to the Spanish, like that handsome Torero;
Who sported a chica con un hermoso sombrero.
I'll thank the bartenders, so swift and so skilled;
I was in line so damn long my buzz was soon killed.
Thanks go to the bouncers, all robotic and burly;
Wear shoes on the dance floor, no flasks for us surely.
Thanks be to the Brotherhood, of glorious SOOPP;
Brother Routhier stood up and he said some bull-poop.
Justin "The Fuck" Hawkins, how jolly was he;
Thanks for ruining the bathroom where I needed to pee.
Why thank you Luke Siemens, I'm sure you had fun;
With the Percolator Blow-Vac Nine-Thousand-and-One.
Thank YOU Mister DJ, for knowing what's up;
He played that song "Friday" and people threw up.
I should also thank Emily, who stole those sunglasses;
That hid my keen eyes while I ogled fine asses.
Thanks to all you fine grads, whom we toasted with cheer;
You son-of-a-guns can really chug beer.
And Steph Seemel you're welcome, we did our damn best;
Had a hell of a time and drank for the rest.
It's time I must end, it's time I must close;
This poorly wrote rhyme of Engineer's prose.
Thanks all who came out, for 'twas a great night;
So thank you Reflections for partyin' right!

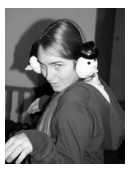
What's in this issue

~ Outgoing Exec Reports ~

President

Suzanne Swaine
AKA "Ducktub"
Aerospace VI

This is probably the last you'll hear from me. After six long years I've packed my bags and will be attempting to join the real world. It's been a pretty crazy six years, and 2010-2011 in particular was a very challenging - but also very rewarding - year. Everything has been pretty much wrapped up now. With my last AGM and Reflections (and Ring Day! Wooooo!) over with, the only thing left to do is to finish up my school work and transition your new Council. I'll keep this short and sweet though. I've met some amazing people and had some insane experiences, and want to thank you all for making C-Eng what it is. Without a doubt, I'll miss you all.



Social

Steph Seemel
AKA "Calamity Jane"
Sustainable Energy III

This is your VP Social, signing off for the year! I hope I had a chance to meet all of you at one of the social events this year. It has certainly been a whirlwind of a year, full of laughs and fun times. I have worked in the attempt of attracting faculty to our social events and having them hang out with us in a more relaxed setting. I contacted all the department administrators to open a line of communication between faculty and the CSES VP Social. This took the better part of the year to complete and will handed over to next year's VP Social; hopefully faculty attendance at our events will continue to grow!

Some of you may have noticed that ticket prices for engineering events decrease when you bring a food donation. These food items are for donation to the food bank, and this year we have amassed a very large pile! Whenever a food item is not donated as part of a ticket sale, a raction of the price is donated to the Children's Hospital; this year's donation is over one thousand dollars! I hope these charitable contributions will continue in future years.

Reflections is now over and the graduates have been sent out into the real world. Best of luck to them! Lastly, those who have put their blood, sweat and tears into the society this semester have been well-recognized with much food, drink and celebration at the VAP! All that remains is to offer a big, warm welcome to next year's VP Social, Eric. I wish you luck and fun times! Beans.

External

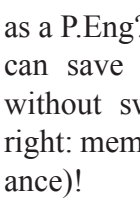
Kevin Atkins
AKA "Assbeard"
Aerospace II

Since you last heard from me, the VP External portfolio has hosted a few events. The first event was the CSES 24-hour Charity LAN and Magic Tournament. Despite numerous technical mishaps (not our fault, I promise!), the event was a success. We raised over $250 for the Children's Hospital of Eastern Ontario (CHEO), just shy of our $300 earnings from the first term Charity LAN.

The other event we ran was the Professional Engineers of Ontario (PEO) and Ontario Society of Professional Engineers (OSPE) information night. The event included talks about changes to P.Eng requirements and standards and the benefits of the OSPE student membership program. Did you know that an OSPE student member receives the same benefits as a P.Eng? That means for ~$30 you can save money on car insurance without switching to Geico (that's right: members get reduced car insurance)!

It has been a fun year as VP-External There was much laughter, many long train rides and plenty of time spent catching up on school work. This is not the last you see of me, though, for I will further my commitment to CSES as next year's VP-Internal. If you have any suggestions or questions, feel free to e-mail them to me!

Finally, the Engineering Society Council of Ontario (ESSCO) will be holding its Annual General Meeting (AGM) in May; CSES is looking for delegates to represent CSES at this event. Keep an eye out on CSES Announce for the opening of applications. Good luck to all those who apply!



Services

Kristen Van Den Tillaart
AKA "Hop Along"
Aerospace IV

Not too much has been happening this month other than paperwork and whatnot in order to finalize all the changes to be made over the summer. These changes include introducing a new SGRC card reader, possible rearrangement of Leo's Lounge and expanding the SGRC boardroom table. For those who were not at the AGM this year, some SGRC policy changes were made, which mainly included adding a section to regulate the storage space that will be built in the SGRC. I guess this concludes this school year; second semester was a blast.

Good luck to everybody on exams, hope to see most of you around next year (if not, I will assume the worst). Also Congratulations goes to the graduates for...well you know...graduating!

Ciao for now!

Internal

Jamie Barresi
AKA "Invisible Man"
Systems III

Hey C-Eng! THE YEAR IS ALMOST DONE!!! Heck of a ride, eh? To those of you who just got your iron rings: congratulations, you survived. If you weren't at Reflections, your Pewter Mugs are in the CSES office; pick them up (or arrange some other way of getting them) before December 31st or you will (and I mean *absolutely* will) lose your deposit. To those of you annoyed by my double sending of Announce emails or seeing two different announcements in one week, I apologize: I really did try to avoid this whenever possible. To those of you I have worked with this year, I'd like to thank you: it's been a pleasure. Finally, for those of you returning next year, I wish you another sucessful year.

As I sign off for the last time as VP Internal, I say for the last time: keep it classy, C-Eng!

Academic

Josh Coulbeck
AKA "Canadian Pie"
Electrical IV

Hey guys! This will be my final exec report (thank God!). It has been a pleasure serving as your VP academic, and I would like to thank all of my directors, especially Larissa Gross who did an amazing job with National Engineering week this year.

I haven't been doing much this last month, having been busy with my 4th year project but. I did run Pi day, however, during which we raised about $50 and Associate Dean Khoo pied me in the face. If you are interested in helping with the academic portfolio next year, please talk to Matt Molkoski, your new VP academic. To anyone still reading this: why are you still reading? Flip to the comics: they are actually funny this time, I promise.

To anyone graduating this year: congratulations. I wish you all the best for your careers. If you do get a job, let me know because I haven't.

Finance

Jordan Briggs
AKA "Crack"
Aerospace IV

Well, the year is pretty much done. There are shiny rings are on fingers, and shiny mugs in hands, and I don't have either because I'm for another year. Sadface. Since the last issue we've had our Annual General Meeting, and it was a blast! If you were there, thanks for coming out and showing support, and I hope my budget report didn't bore anyone too much. Unfortunately, we were unable to successfully pass a motion to purchase a battlehammer, which seemed to upset a lot of people.

I have also been busy transitioning Emily to take over as VP Finance and tidying up some loose ends before my term officially comes to an end. We have also just received the rest of our student fees, and thus will be able to set up an investment fund for CEC 2013, which Carleton is hosting. I'll also soon be taking care of the lovely annual task of filing taxes as I wrap up the year, and final expenses for things like Reflections are posted. That said, anyone who has been granted Student Group Funding, please try to get all your receipts in by the end of the term!

As this is my last report as VP Finance, I just want to say that it has been a pleasure serving the noble denizens of CSES. I can tell you that I've learned a lot over the past year on executive, and I hope to put as much of that knowledge and experience back into the society as possible over the next year. With that, good luck on exams everyone, and have a great summer!

Pubs

Kaitlyn Stockermans
AKA "Topless"
Civil IV

So long, farewell, auf Wiedersehen, goodbye!

If any of you have actually been reading the exec reports, then you'll know exactly what I did this year. Since I seem to be talking about an imaginary creature, I'll recap for all us normal folk. I produced a ridiculously large amount of Iron Times issues from a ridiculously small amount of contributions. I got ads in the Iron Times once again so Publications can make some monies. Also, the handbooks are ALL GONE since they are so amazing, the website is as up-to-date as it can be with a missing webmaster and the passports are... well, passports.

Adieu, adieu, adieu.

Congratulations to Jordan Briggs in winning the epic tardiness award for outstanding achievement in submitting exec reports late.

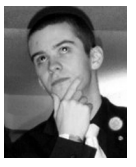
~ Incoming Exec Reports ~

President

Jamie Barresi
AKA "Invisible Man"
Systems III

Hey C-Eng. I'M BACK! For those of you who don't know me, my name is Jamie Barresi and I will be your President for the 2011-2012 year. My hopes for the year are to continue constitutional reform with an emphasis on clarity; to continue keeping our inter-society relationships strong and establishing new relationships with other societies like the newly-formed Carleton Student Science Society. If you know of any other non-engineering groups, please let me know! I also would like to maintain CSES' recently-strengthened relationship with the faculty, which is an important asset if we ever want to run any big events. Finally, I would also like to keep council accountable, letting them know that there are consequences for slackin'. Much progress in this department was made this year and I would like that to continue.
Any questions? Wanna get involved? Wanna try spearheading something and getting it off the ground? Let me know! We can work it out! See you next year CSES!

Oh and by the way: I AM BATMAN!



Internal

Kevin Atkins
AKA "Assbeard"
Aerospace II

My name is Kevin Atkins and I am the newly elected Vice-President Internal for CSES. To highlight my most relevant past experience, I was the VP-External for CSES in the 2010-2011 term and am the Canadian Engineering Competition (CEC) 2013 Co-Chair and Logistics manager for EngFrosh 2011. I am also entering my 2nd year as the National Capital Liaison of the Canadian Federation of Engineering Students. With the help of this experience, I plan to ensure the continuing success of the VP-Internal role.

In addition fulfilling my usual mandates, I plan to enact election reforms; increasing voter awareness and re-arranging election timeframes are among the changes I plan to propose.

If you have any suggestions or questions for me, feel free to e-mail me at atkinskevin2@gmail.com

Finance

Emily Lemay
AKA "Lap Jumper"
Biomed II

Hi, my name is Emily LeMay. I'm going into my third year of Biomed Mech and will be your new VP Finance. For those of you who don't know me, you might be able to recognize me as the voice that often yells "Noooooo!" in the halls of Mackenzie or Leo's or anywhere else for that matter.

As VP Finance, I have the super-eAs VP Finance, I have the super-exciting job ensuring that the CSES accounts are accurate balanced and of overseeing student group funding. On that subject, if you need some funding for your 4th year project or extracurricular group, be sure to keep an eye out for Student Group Funding (SGF) applications next fall.

I am also looking for two directors to help me with my duties next year: a Treasury Director to assist with day-to-day work and an SGF Director to help organize funding applications. If you are interested in either position, keep an eye out for an Announce email indicating that applications are open.

If you have any questions, don't hesitate to email me at elemay1@connect.carleton.ca.

External

Kristen Jerabek
AKA "Dorothy"
Civil I

My name is Kristen Jerabek and I'll be your new VP External for 2011/2012. I serve as a liaison between our students and external groups (such as the Engineering Student Societies' Council of Ontario (ESSCO), the Canadian Federation of Engineering Students (CFES), Professional Engineers of Ontario (PEO), and the Ontario Society of Professional Engineers (OSPE)) as well as forming and maintaining ties with these groups. I'm responsible for selecting and heading delegations to represent CSES at conferences and for informing all of you of opportunities for involvement within external organizations such as the VP or Officer positions in ESSCO and CFES.

During my term I hope to increase awareness of my position, the outside organizations I liaise with and of THE TRAVEL GONG. Additionally, I hope to continue current charity initiatives such as Movember and LAN parties. For this purpose I will be looking for a Charity Director (knowledge of LANs and Magic is a must). I am also currently seeking applicants to attend the Engineering Student Societies' Council of Ontario's Annual General Meeting on the last weekend in May at UOIT in Oshawa. If you need more information or would like to apply, contact me before 5:30pm on April 15th! If you have any further questions or suggestion or would like an interview to be Charity Director, feel free to e-mail me at k.a.e.jerabek@hotmail.com.

Keep it classy C-ENG!

Academic

Matt Molkoski
AKA "Soaker"
Electrical II

Hi, my name is Matt Molkoski and I'm 6' 1", with long brown hair and greenish-blue eyes. I'm a Gemini who enjoys playing sports and going on long, relaxing concrete toboggan rides down icy slopes.

As your new VP Academic, I will be making sure that Interface, the annual industry meet and greet, actually takes place next year! I will also be looking for directors to help with National Engineering Week. Email me if you are interested in helping out! Finally, as your new VP Academic I want to foster greater recognition and awareness of Engineering and encourage some new blood to go out and participate in events. To this end, I want to do some more high school outreach, possibly traveling to schools to promote Carleton Engineering. If anyone wants to help with this, you know what to do. Email me! Oh, by the way: my email is mmolkosk@connect.carleton.ca. I hope everyone has a great exam period and summer and I look forward to working with everyone come September!

Social

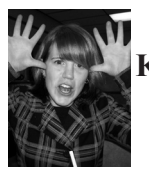
Erik Willis
AKA "Caulk Tease"
Aerospace III

First off, I want to thank everyone who voted for me. To those who didn't…well, whatever!

I have a lot of organizational changes planned for next year to help increase turnout at engineering events. This includes a Google Calendar where executive from every engineering group and society can post even announcements so that other groups can schedule their own events accordingly. This will hopefully help the smaller groups and societies run larger events without getting overpowered by the bigger groups. On top of that, I want to use one of the boards outside Leo's as a calendar so members can see every month's events at a glance.

Now on to the fun stuff! I plan on running all the regular events you know and love and keeping them just as awesome as always. Whirlwind was a huge success this year, so why mess with a good thing? If it proves impossible to get bonspiel back, I will organize another equally - if not more - awesome event in its place! I will try my best to book athletics on time with all the sports everyone wants to play!

Looking forward to seeing all you next year! Next time, we eat an Artsie!



Services

Kristen Van Den Tillaart
AKA "Hop Along"
Aerospace IV

Hello people of Engineering and various other programs!

For those who don't know me, my name is Kristen Van Den Tillaart and I was elected VP Services for the upcoming year. So just a heads up on what I plan to accomplish next year. First, things will be taken care of over the summer as mentioned in the outgoing VP Services' blurb. I have also selected my new Leo's General Manager: Kaeli Mulvaney Courtois. I'm currently interviewing candidates for other managerial roles, the managers are to be chosen shortly, before exams. I will be working to improve the professionalism of the office, such as new countertops etc... I will always be working to improve and update the equipment loan program. I will do my best to constantly improve and maintain the Office, SGRC and Leo's. Most importantly, I want to get more use of the services CSES provides , which means making you more aware of all the Services we offer.

See you next year!

Pubs

Caleigh Rutledge
AKA "Paperbag Princess"
Civil II

Hey C-Eng! My name is Caleigh Rutledge, and I will be your VP Publications for 2011-2012. I have been on CSES for the last 2 years, but I still very excited to finally be taking an executive position. I have many plans for next year and will do utmost to make your publications interesting and informative. I have already started designing your new agenda for the fall and am looking forward to publishing some great Iron Times articles! But I definitely need your help, so feel free to send me lots of articles, comics, and pictures. Also, don't forget to apply for publications directorships so you can help me out!

So many exec reports, so little space.

Vena Quiz

How is your space trivia? Take this short quiz to find out! Continuing in the tradition of last Vena's quiz, we encourage all of you to send in your answers to irontimes@cses.carleton.ca. Using Wikipedia is cheating. This history of who was the first to do what is somewhat of an interesting one. Also it's space themed because I'm an AERO D and I wrote it.

(16 correct answers out of 20 = Genius)

1. Which country was the first to launch a man-made object above 100 km and subsequently into space?
2. What type of animals were the first to be launched into space?
3. Who was the second woman to enter space?
4. What was the first probe to crash into another planet?
5. During which mission was the famous "Blue Marble" photo taken?
6. Who was the first astronaut killed during a space flight?
7. Which mission made the first manned lunar orbit?
8. Who is the only person to have never served in the United States Armed Forces to set foot on the moon?
9. Which Carleton professor bears a striking resemblance to an Apollo Era astronaut?
10. Which astronaut does he resemble?
11. What year was the first space station lauched?
12. Which was the first manned space station to not incur any casualties in its operation?
13. Which manned mission set the record for the fastest speed relative to the Earth?
14. What is the only probe to visit all of the outer planets?
15. Which shuttle carried the first Canadian into space?
16. Who was the first neurologist to enter space?
17. Which American astronaut was born in Canada?
18. Who was the only Canadian to visit the Mir space station?
19. Who were the first two Canadians to be in space simultaneously?
20. Who are the only two commercial astronauts?

For those of you with better things to do, answers will be included in the next issue of the Vena.

EngLove 2011 - Carleton Invades McMaster

Erik Willis
AKA "Caulk Tease"
Aerospace III

&

Eric Escaravage
AKA "ATM"
Systems II

The epic journey that was Englove began with a 4-6 hour car ride. I assure you that everyone was well-hydrated during the ride up. Upon our arrival, McMaster held a cup sale in our honor. The McMaster redsuits did not expect our flightsuits to be as thirsty as we were, given how much hydrating we did on the way over.

After our cups ran dry, the friendly redsuits led us to a nearby pool hall to play some billiards. The cougars there were delighted to see some young blood and swiftly began applying lick-on tattoos. Once the pool hall had closed, we all went to bed well-hydrated.

The next morning we were hoping for more cups and eggs, but we had run out of cups the night before. To make up for this, MacMaster laid down bacon strips (And bacon strips! And bacon strips!) to keep all the haters satisfied.

It was then that a now-legendary individual took a bet to see who could become the most hydrated by noon. There was only one other competitor (who eventually won, but only by nosing ahead in overtime). The losing individual often needed encouragement. so we chanted "Robbie, Robbie, Robbie" until he manned up. Needless to say, he visited the bathroom many few times before noon rolled around.

During these proceedings, a young lady overheard us (or smelled the bacon) and came over to visit. To our surprise, she was chatting with her parents from South Africa on Skype. In his typical hydrated fashion, Robbie began hitting on the girl and her parents. Needless to say she left soon after, like all the other girls around Robbie that weekend. Robbie attempted to find her again, but ended up just standing in the middle of the street for a while. After more chanting, we headed down to the campus for some tours. Robbie got his revenge for all the fireball stickers around campus by plastering CEng stickers all over McMaster's engineering lounge. We then visited McMaster's nuclear reactor. One does not usually get the chance to see a reactor up close, but there it was, smack dab in the middle of campus. After "engineering" our way onto their football field, we packed up our things and set out to experience the sights and sounds of downtown Hamilton.

After a bit of a pub crawl, we were "off to see the musical, the wonderful musical of Mac". Upon arrival, we began chanting "Carletron, Carletron", leading one passer-by to curse "Oh fuck, Carleton's here". If you have ever needed an effective way to silence a crowd before a show, try giving 3 flightsuits some MAC whistles and telling them to blow as loud as they can. In typical C-Eng fashion, we were the most obnoxious people in the theatre (though not without some help from our new redsuit friends, of course).

After watching a great show we headed to the Honest Lawyer for some after-show shenanigans. This part EngLove generated the most epic fails. Fights nearly broke out over a few girls, though thankfully all crises were averted. This group of girls apparently had a thing for Carleton guys, for by the end of the night there were at least 3 hook-ups. Needless to say, there was more chanting of "Robbie, Robbie, Robbie", prompting Robbie to open his mouth. His girl seemed far less impressed with him after that. After much discussion we determined that Robbie just needed keep his mouth shut and seal the deal. Little did the guys know, however, that one of the girl's mothers was on route to pick them up, single-handedly cock-blocking three flightsuits at once.

Needless to say it was an awesome weekend and we are looking forward to more EngLoving the future.

World Water Issues

Natalie Linklater
Environmental Graduate

Did you know that over 1.2 billion people don't have access to safe drinking water and 2.4 billion people lack proper sanitation facilities? The United Nations has designated March 22 as World Water Day to raise awareness of these issues. To do our part, SEEDS hosted two events: a special lecture with Professor Örmeci titled Water Sanitation and Health, and a screening of the documentary Blue Gold: World Water Wars. Professor Örmeci enlightened students about the difficulties facing developing countries and new treatment techniques, such as Solar Disinfection (SODIS), that are being implemented. Professor Örmeci also discussed some of the issues that we face in Canada. For example, despite Canada's reputation as a "water-rich" country, available water is not where the population is located. For this reason, some areas may face future water shortages. In the documentary Blue Gold: World Water Wars, leading water crusaders explain efforts that have been made to prevent the privatization of water. In most cases, when water treatment and distribution is privatized, the quality decreases while prices increase. Water is essential for life and should be available to everyone. The screening was well attended and a lively discussion followed.

To do our part for the Japan earthquake and tsunami relief, SEEDS collected donations during our Lunchtime Potluck that occurred on March 18th. Participants were very generous and we donated $100 to the Canadian Red Cross' emergency relief efforts. SEEDS would also like to congratulate Simone Charron for winning the Golden Spoon Award. Emily Vingerhoeds, a member of the SEEDS executive team, is also deserving of a special congratulations as she has been selected as this year's winner of the Future Environmental Professional Scholarship.

In closing, I would personally like to thank everyone who helped make SEEDS a success this year! On the completion of our second year, we are still going strong and are gaining momentum. If you like what SEEDS is doing and want to contribute, keep your eyes peeled for the first-ever SEEDS' Executive Member and Officer Applications. You can get involved at any time, but the successful applicants will form the core of our executive team and help get the ball rolling before the fall. Details of the available positions and application are posted on www.seedsottawa.ca.

Hint: the answer to question #9 is one of the best profs you will ever have.

~ Space Truck ~

Gilles Messier
AKA “Nightstalker”
Aerospace IV

Almost thirty years to the day after its maiden voyage, the Space Shuttle will make its final flight this June. With its primary mission of resupplying the ISS passing to traditional capsules like the Russian Soyuz, it is uncertain when a winged spacecraft will again enter regular service. In commemoration of the Shuttle’s retirement, this month History of Engineering looks at the history of the space-plane concept.

Across the Pond

Though winged spacecraft are a staple of science fiction, the first serious attempt to design such a vehicle was made in the 1930s by German inventors Eugen Sanger and Irene Bredt. Their craft, dubbed Silbervogel (“Silver Bird”) was phenomenally advanced for its time. A one-manned, flat-bottomed, wedge-shaped craft with stubby wings, Silbervogel would have been accelerated to 1,200 km/hr by a rocket sled. It would then fire its own engines and climb to 145 km. As it fell back to earth Silbervogel would skip like stone across the atmosphere, allowing it to cover huge distances. Atmospheric drag would eventually decelerate the craft, allowing it to reenter and glide to a conventional landing.

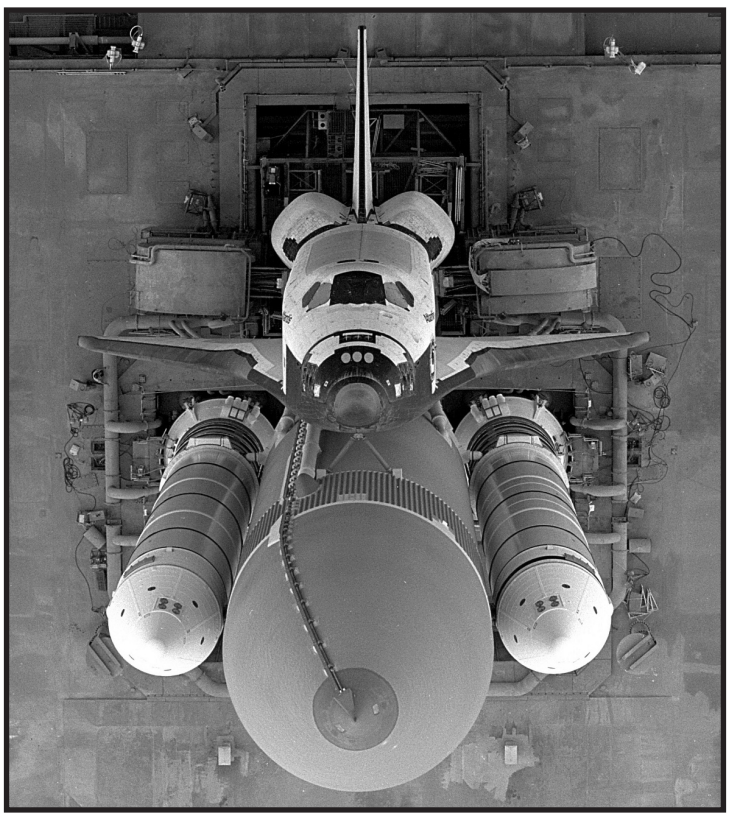
During WWII, the German Luftwaffe evaluated Silbervogel for their Amerika Bomber project. In this scheme, Silbervogel would skip across the Atlantic, drop its payload on New York, and land on a Japanese-held Pacific island. The heavy airframe, however, limited the payload to only four tons. As Germany lacked nuclear weapons, radioactive “dirty bombs” were chosen to maximize destructiveness.

Ultimately, Silbervogel was deemed too complex and impractical and never left the drawing board. Nonetheless, the advanced craft influenced spacecraft design for years to come. Sanger and Bredt’s greatest contribution to spaceflight, however, was the regenerative-cooling cycle used in nearly all rocket engines.

Ahead of the Curve

Contrary to popular belief, the technological progression of the Space Race was often more a matter of politics than technical know-how. No development better illustrates this phenomenon than the Boeing X-20 Dyna-Soar, a cancelled space plane that could have flown 20 years before the Space Shuttle. Begun in 1957, Dyna-Soar (short for Dynamic Soarer) was a U.S. Air Force effort to develop a small orbital aircraft for nuclear bombing, reconnaissance and satellite deployment/repair/sabotage missions. A spiritual successor to Silbervogel, the small one-manned delta-winged craft would have been boosted into orbit atop a Titan III ballistic missile, carrying weapons, reconnaissance equipment, a small satellite or 4 crew members in its cargo bay. Upon completing its mission, it would re-enter the atmosphere and glide to a controlled dead-stick landing. Uniquely, Dyna-Soar could efficiently change its orbital inclination by dipping into the atmosphere.

Dyna-Soar was far more advanced than contemporary spacecraft like the Vostok and Mercury capsules.The prevailing late-1950s attitude was that winged spacecraft were the best method for reaching orbit; the hypersonic X-15 research



aircraft was developed to study the aerodynamics of such vehicles. Indeed, many X-15 pilots (including Neil Armstrong) were eventually selected as Dyna-Soar pilots. But the project itself quickly grew redundant as it transpired that Dyna-Soar’s missions could be performed more cost-effectively by ballistic missiles and spy satellites. Booster selection issues and the accelerating pace of the Space Race (capsules were easier to develop than a complex space-plane) also contributed to Dyna-Soar’s cancellation in 1963, mere months before the start of full-scale testing. Nonetheless, the data collected during Dyna-Soar’s development proved invaluable to the later design of the Space Shuttle.

Cold War Rivals

Boost-glide spacecraft were also extensively researched in the Soviet Union; indeed, in 1946 the USSR began developing a ramjet-powered version of Silbervogel based on captured copies of Sanger and Bredt’s reports. That project was soon cancelled, but the idea was resurrected in 1965 in the form of the MiG-105 Spiral, a one-manned space plane similar to Dyna-Soar. Spiral (nicknamed “Lapot” (clog) after its shoe-like shape) was in many ways more advanced than Dyna-Soar,being launched off the back of a reusable air-breathing hypersonic aircraft rather than a disposable rocket. Spiral also featured variable-geometry wings and a small turbojet engine for powered flight in the atmosphere. Lacking a cargo bay, however, Spiral would have been limited to reconnaissance and satellite/spacecraft interception roles.

In 1974, following several flights of an atmospheric test prototype, Spiral was abandoned in favor of Buran, a Russian Space Shuttle clone. The Soviets believed the American Space Shuttle would be used to test orbital weapons, steal Soviet satellites, and bomb targets from orbit, despite the Shuttle being physically incapable of these feats. Buran was thus hastily developed to grant the USSR similar capabilities. Unlike the Shuttle, Buran had no ascent engines, instead riding piggyback on the gigantic Energia booster. Buran made its only – unmanned – orbital flight in 1988, but the program was cancelled in 1993 before any manned flights were launched. The prototype was later destroyed in a hangar collapse in 2002. One great legacy of the project, however, remains: the Antonov An-225, built to transport Buran. It remains the world’s largest aircraft.

Tragic Compromises

The Space Shuttle (or Space Transport System - STS) program began in 1973 following the end of the Apollo program. With NASA’s budget severely reduced, the STS was designed for maximum cost-effectiveness. It was to fill all roles, from launching and servicing satellites to resupplying space stations. Mission turnaround times of less than a week were envisioned, permitting an ambitious launch schedule of 50 missions per year. This would offset the project’s massive budget via reduced per-launch costs. Thus the STS was envisioned as a regular, convenient gateway to Low Earth Orbit, a cargo truck for space.

This optimistic vision, however, quickly fell apart. The Shuttle was originally to have been launched by a large winged booster which would glide back to earth for reuse; when this booster proved impractical to develop, the current external-tank configuration was substituted. Unfortunately, the external tank manufacturer could only complete 10 units per year. Worse, being 20% overweight the orbiter could no longer launch polar-orbit military satellites, a major part of its intended mission. Numerous other compromises plagued the design: the original liquid-fuel boosters were replaced with cheaper solid motors (despite serious safety concerns) and the planned jet engines (for landing) and ejection seats were deleted, leaving few survivable abort modes. Furthermore, the silica-tile heat shield proved extremely fragile, requiring lengthy maintenance between flights.

It soon became clear that the STS would never deliver on its promise of easy, regular access to orbit; the shortest mission turnaround time was 58 days. Nonetheless, NASA pushed its aggressive launch schedule, a policy that led directly to the 1986 Challenger disaster. After this incident, the Shuttle was rarely used to launch satellites, further reducing its usefulness. Though the construction and resupply of the ISS was seen as justification for maintaining the fleet, disposable rockets have since proven more than adequate for this task. These problems culminated in the 2010 decision to retire the Shuttle fleet.

Though the idea of a winged, reusable spacecraft is older than space travel itself, the concept has yet to reach its full potential. Perhaps contemporary incarnations such as the Russian/ESA Kliper will finally deliver on the promise of regular, inexpensive access to space. But if there is one lesson to be learned from the STS program, it is that perhaps this goal is unattainable. Space is a dangerous place, and reaching it may always be a riskier endeavor than we would like to admit.

None of the answers are in this article, though one is indirectly mentioned.

~ Photo Gallery ~

These pictures aren't colour because I produced too many Iron Times issues. Fuck yea.

~ Photo Gallery ~

When a certain internet famous song was played at Reflections, I watched 5-10 people immediately walk off the dance floor.

~ Moonbuggy Adventures ~

This Year

Nolan Hunder
AKA "Pi"
Aerospace IV

Tally Ho! Another great year of moonbuggy antics drawn to a close. This year's team began designing in September, began building in January, raced in Alabama in April. We received some interesting media coverage during this process including a newspaper not understanding degrees of freedom and naming this joint "The Freedom Joint," the announcement of this year being the 20th anniversary of the Apollo missions, and that in one article one of our riders was named while the other was referred to as "a six foot man."

At the end of March, a team of 8 representing the 21 of us, armed with the wrench of power, set off down south for the competition. Driving through the United States just to get there we passed 27 police cars whom had pulled someone over in two days, and after crossing the Dixie Line, counted 18 pieces of road kill, including one that will never allow us to look at a deer the same way. The most noteworthy part of the trip was the incredible scientific discovery that apparently brass can cut steel. We had a small piece of brass completely carve out a chunk of one of our steel axles. This, in addition to having two chains fall off, happened on the first race unfortunately causing us to time out. We then regrouped, successfully re-keyed and mounted the axles and tried again the next day in race number 2. After losing the chains again we also lost steering this time round becoming the number one client for Murphy's Law.

In the end, a lot of randomness took place, a lot of sleep was lost, a lot was learned, and a lot of fun was had. We learned that bacon doesn't belong on sundaes, test the materials before assuming their strength, having a master metal filer comes in handy, people like free stickers, Alabama is cold this time of year, and duct tape can fix a lot, but not all.

Last Year

Gilles Messier
AKA "Nightstalker"
Aerospace IV

The 2009-2010 Moonbuggy project was – to put it mildly – something of a disaster. Following a slow design phase, the sudden resignation of our Technical Manager sent the project utter chaos. As the Manager was also our only experienced welder, his departure created a construction bottleneck as one member raced to complete all the welding singlehandedly. As we scrambled to complete the buggy on time, countless poor decisions crept into the design (such as the overuse of aluminium). These decisions haunted us even after welding was complete: every component in the buggy fought us tooth and nail during installation, forcing us to beat every piece into submission (exasperated cries of "Stop! Hammer Time!" were a common fixture of the build, as were "We're going to need an old priest and a young priest!" and "Ooookay...gonna vomit."). Three days before our planned departure, the buggy was still not functional; in retrospect, we should have given up right there. But no: we continued to wrestle with it until the morning of departure. Reasoning that we could fix it in Huntsville, we loaded the still-inoperable vehicle and our tools into a white rental cargo van (ie. "The Beast") and set off towards Dixieland.

The drive to Huntsville was long and frustrating, the direct result of our flawed navigation system. Possessing only one GPS unit, we decided that one vehicle would navigate, communicating turns and exits to the other via walkie-talkie. This plan quickly broke down, however, as we constantly drifted out of radio range. This resulted in so many wrong turns and doubling-back that our route was more circuitous than a drunkard's walk. Adding to our woes, one of our drivers was pulled over for speeding in Virginia (while I was sleeping in the passenger's seat; being awakened by a State Trooper is quite a jarring experience!)! Luckily he was able to play the "clueless foreigner" card and was let off with a warning.

Arriving in Huntsville, we hit the ground running. After pitching our workshop tent, we immediately launched back into construction, toiling desperately to breathe life into the stubborn buggy. Over the next day and a half we hammered, drilled, swore, sweated and quickly went insane under the hot Alabama sun. When it came time to qualify our buggy (ensuring that it was safe and could easily be carried, unfolded etc.), the vehicle still didn't roll properly; we had to physically manhandle it to the proving ground. After passing qualification, we went straight back to work. With the disqualification deadline looming, our nerves were frayed to the breaking point. Finally, with minutes to spare, we at last thought we had it: the buggy was complete. Crude and jury-rigged, but complete. Our riders sat down, buckled in, and pedaled the buggy out for its maiden voyage...

...then, after rolling two metres, an axle snapped. In that instant, it was all over. After all that time, blood, sweat, tears and shattered nerves, the buggy was dead.

Despite losing several years of our lives to stress, we took the defeat in stride. After packing away our buggy and tools, we spent the rest of the day touring the Marshall Spaceflight Centre museum and Rocket Garden (or, as we called it, "Phallic Symbol Park"). We then went for a steak dinner, bought a ridiculous amount of fireworks (very cheap in Alabama), and left Huntsville a day ahead of schedule. Our plan was to spend a day in Washington, D.C. touring the Smithsonian.

But our bad luck continued to haunt us. Not one hour outside Huntsville, we took a wrong turn and ended up on a narrow, twisting country road in the middle of the night. Shortly thereafter, the driver took a sharp turn and we began to skid. The heavy cargo van spun 180 degrees, careened off the road, and rolled over into the ditch (Not five minutes prior to this, I had made a tasteless joke about the locals raping us a la Deliverance if we crashed; for those of you who believe in such things, yes: Karma is a bitch). Hanging sideways from our seatbelts, the driver and I sat in stunned silence for several moments before we realized: we were completely unhurt. Despite the rollover and the heavy tools that had rained down around us, neither of us had so much as a scratch. Rummaging through the debris, we found the walkie-talkie and frantically reported the crash to the lead car. At first they thought we were joking, but several expletive-laced replies finally convinced them we were serious. We then climbed out the now-horizontal driver's door and jumped down just as the locals started coming down from the hills.

To our relief, the locals were some of the nicest people we had ever met. One couple - despite having children asleep in their car – waited as the police and paramedics checked us out and a wrecker hauled away the now-totalled van. They then lead us to the nearest hotel and even paid for our rooms (that's Southern Hospitality for you)! The next day, we met with the rental company and managed to acquire another van. Unfortunately, the buggy did not fit, forcing us to dismantle it. Keeping the most valuable components, we left the aluminium frame as a gift for the wrecker (it is now seeing more effective use as a storage shed). Finally, 24 hours behind schedule and with exams two days away, we began the mad dash back home.

The return drive was an exhausting experience. Unable to sleep well in the uncomfortable vehicles, we soon became bleary-eyed, barely-functional zombies. Our only reprieve was when we stopped in a random field to fire off our fireworks stash. Being aerospace engineers, we soon discovered how to make elaborate, multi-stage missiles with ordinary bottle rockets. It was a relaxing, care-free deviation in the otherwise gruelling Drive of Death. Two days later, barely conscious, we finally rolled into Ottawa. I lapsed into a coma for 8 hours, then awoke to write my first exam (during which I almost passed out). Mercifully, it was an easy one.

Thus ended the great 2010 Moonbuggy Odyssey. What did we learn from this experience? Many things, but most importantly that aluminium is not good for everything, it is unwise to make one person the lynchpin of a whole project, not everything can be fixed with a hammer, you should never insult the locals, you've got to know when to fold 'em, we're going to need an old priest and a young priest, and lastly: NEVER AGAIN!

There is nothing that can't be fixed with duct tape. NOTHING!!!

~ List of Favourites Lists ~

CULPRIT Moments

5. In March, while preparing for out PDR, we suddenly found out that while our spacecraft is the correct size, its orientation makes it protrude from its allotted volume envelope.

4. During the PDR, each student was allotted 10 minutes to present their contribution to the project. Bored, I began counting the number times someone said "um" or "uh." The three highest counts (not including question period) were 98, 131, and 166.

3. At one point, without even realized what had just happened, I was volun-told to head the committee visiting ComDev, despite the fact that I don't own a car or know my way around Waterloo (let alone the Southern Ontario region).

2. The first time I saw the redesigned model of our spacecraft, I thought: Dr. Freud would have been proud.

1. Up until this year, the CULPRIT project had used a mass budget of 100 kg. Careful examination of the payload we'd be replacing revealed it to be only 50 kg. All of a sudden we had to cut nearly half of our spacecraft's weight. Anyone who knows how spacecraft are designed will know that there is not a lot of empty weight available to be discarded.

Prof Quotations

7. "My definition of intangible is somewhat different from that of the dictionary."

6. "Please do not bring a programmable calculator. If haven't anything else, you may bring it and not use it."

5. "I don't fully understand your answer. So anyways..."

4. "Now ask about something else."

3. "Let's pretend you didn't see the solution."

2. "We will only make it so by assuming it."

1. "I completely agree with myself."

Annual General Meeting Moments

7. Luke's reason for why he should be chair, which made me pause and state "I don't think I can top that." Even though was running against him. Luke's reason? "If I'm chair you won't have to put up with me asking so many questions."

6. Ben's sendoff when he finished his council report.

5. A simple majority is 50% plus 1 rounded down to the nearest person, right?

4. Eric returning from a math test just in time to be nominated for a position when he didn't even know what was going on.

3. The AERO D and AERO C societies requesting a seat on council. It is well known that us AEROs are rarely given a chance to speak.

2. Nicole's undying quest to promote toplessness.

1. The motion – and subsequent reconsideration motion - concerning CSES's potential purchase of a battle hammer for defending the office.

Prof-Student Q&A

Q: "What is the advantage of using this method?"
A: "Well, first of all it is a different method."

Q: "What is the value of a human life?"
A: "$37.51"

Q: "Any questions?"
A: "What the fuck was that?"

Best TA Quotation

This is not a list but a quotation I thought was worth mentioning, especially in the quest to fill space.

"I'm sorry for your not understanding. It is not my fault, it is your prof's fault."

CULPRIT Quotations

10. "Usually there is a 'thou shalt not litter' requirement, even in space."

9. "In space, everything is infinite."

8. "And now for the much more credible blingcheese.com"

7. "At least it's not Wikipedia."

6. "I'm a fan of collective ignorance."

5. "The odds of getting it are somewhat less than a snowball's chance in hell."

4. "Hey, you speak American, right?"

3. "I just wanna say you're all ruining my life."

2. "So what can I touch, Marla?"

1. "I suppose it has flight heritage; it doesn't have a successful flight heritage."

AGM Quotations

10. "I can do it; I've got connections with CSIS."

9. "Jamie is willing to punch people."

8. "You claim to have tried everything to get people to write articles. Did you try topless?"

7. "Science is our brothers from other mothers."

6. "Way to pull a Yukon."

5. "Suzanne is telling me I'm accepting."

4. "Do they make it for men?"

3. "Can you do a quick stroll paw?"

2. "They lied to Lauren and took her money for no reason."

1. "Take it out, blow on it, put it back in."

Student Quotations about a Prof

6. "Why is he telling us the subtle cultural references he plans on using in the exam in advance?

5. "There's nothing wrong with being mean to the prof if he is incompetent."

4. "He's expecting us to be clairvoyant."

3. "Just because this is not his field doesn't mean he won't be more competent than the prof."

2. "A chimp with down syndrome is more competent than the prof."

1. "You are not qualified to talk about what something means in the English language."

ProPrac Quotations

10. Aerospace, that's what I was gonna go into, then I saw the curriculum and said 'I can't do that.'

9. Nothing overlaps with Engineering and Social Work.

8. Algonquin engineers are good because they can't have your job, but are nearly as smart as you.

7. Our parents did us a favour by not procreating enough.

6. What the law says is there has to be some reasonableness.

5. The buyer's market is our parents' fault, they didn't have the courtesy to die young.

4. We're lawyers, we can't use a word without redefining it three different times.

3. If only I could motivate the young women to go home and do it for their country.

2. As lawyers, we make things more difficult, otherwise anyone could do it.

1. The best thing you can talk about is sex.

Some people's purpose in life is to serve as an amusement to others, whether or not this is intentional is irrelevant.

Why Engineers Should Date Architects

Kat Forget
AKA “Honey Bear”
Architecture II

&

Eva J-I
AKA “Nibbler”
Architecture I

&

Ali Piwowar
AKA “Whipped Cream”
Architecture II

1. All night long, all night strong.
2. We are damn good with our hands.
3. “I can weld fuck!” – K.F.
4. If we can commit to basswood, relationships should be easy.
5. Finishing early NEVER happens.
6. Creative positioning and arrangement.
7. We will repeat motions until we get it right.
8. We work well in groups of 2s, 3s or more…
9. We look to new objects for inspiration.
10. The work is never done until the client is satisfied
11. Frank Gehry = architectural masturbation.
12. Architecture incest is bad, so we look to other kinds
13. Hotter female population. Actually, just an existent female population
14. Easy access; the buildings are connected
15. We are always on campus. ALWAYS.
16. You always walk through our building. You may as well stop for a quickie.
17. We usually have beautiful bedrooms…not that the décor will be relevant once you’re in them.
18. We think outside the box.
19. We can reward you for your technical support.
20. Dating nerds is the new thing.
21. We believe the bigger the better (including but not limited to height, length, width, etc.)
22. We can make magic happen no matter how small the space
23. We can make you hot: thermal breaks are no challenge for us
24. You will one day make lots of money, and so will we.
25. We can take criticism. Tell us how you want it, and we’ll make it happen.
26. We present another social group you can drink with… Alpha Pi Phi, anyone?
27. Flightsuits turn us on.
28. If the bed breaks, you can fix it, but we’ll just redesign it.
29. Large scales don’t scare us.
30. We can possibly work in the same firm… with the same cubicles… and the same bathrooms…
31. Our break times are short. Dates can be creative and cost-effective.
32. We do it with models; you can be assured we are experienced.
33. No matter how late you are up working on that lab, we are only a phone call away, dying for a break from drawing.
34. Drafting boards can be used for more than just drafting…
35. We are obnoxiously creative and our parties follow these guidelines.
36. We come up with the greatest nick names. Just ask our tools.
37. Being sick or having a headache is never an excuse for bad performance.
38. We know how to draw out the best qualities in people.
39. We can rock purple.
40. Our program makes yours not seem so bad.
41. We are used to giving a lot and getting little in return.
42. Every day is a design competition.
43. We like a man in uniform (flightsuit).
44. We are used to strippers (the kind we can draw).
45. Vitruvius. Enough said.
46. Process is key. We don’t ease off on the foreplay.
47. Give us flightsuits: they’re designed for easy access.
48. We believe an engineer invented condoms.
49. Erik Willis.
50. We are used to working with all kinds of wood.

Poems

Kristen Jerabek
AKA “Dorothy”
Civil I

No More Arts
I once was a highschool-artsay,
Not a worry but singing all day,
Now I'm in Engineering,
Find physics endearing
And don't know quite what else to say.

Sleep
Napping in Leo’s is fun
But a pen near your face means you run.
Always take off your shoes
If not you will lose
To wash pen off your face is not fun.

Beverages
I’d just like to say that it’s true,
Us engineers drink too much brew.
We sing our loud songs,
and play lots of beerpong
But to you none of that should be new.

WTF Of The Month

These strange creations were found in a gift shop along the main street in Banff, Alberta. We’re not sure who the artist is or what drugs they were on when they thought these pigs were a good idea. At first glance the only thing that came to mind was “you can’t be serious.” There is no better description for these than quite simply “What the fuck?”

The trick seems to be getting the architects to date engineers, not vice versa.

~ Comics & Art ~

CARLETON STUDENT ENGINEERING SOCIETY
2090 MINTO CENTRE
CARLETON UNIVERSITY
1125 COLONEL BY DRIVE
OTTAWA, ONTARIO, CANADA
K1S 5B6
WWW.CSES.CARLETON.CA
TELEPHONE: 1 (613) 520-3616
FAX: 1 (613) 520-3730

TITLE: CSES Battle Hammer

MOTIONED BY: Eric Escaravage

SECONDED BY: Jamie Barresi

DATE: March 23 2011

GOAL/SPIRIT: To procure CSES a battlehammer

WHEREAS: McMaster engineering have a sword where they inscribe upon it the name of past presidents.

BE IT RESOLVED THAT: CSES purchase a battle hammer to hang up in the office above the going to a) Inscribe past presidents name on the hammer, starting with Andrew Harte and b) ~~to~~ deter would be thieves from breaking into the office.

RESULT: FOR: ~~23~~ 23 AGAINST: ~~18~~ 18 ABSTAIN: 5.

MOTION (CIRCLE ONE) PASSES FAILS
CHAIR'S INITIALS: _____

Motion Of The Month

During exec, council and general meetings of the Carleton Student Engineering Society one can submit a motion for approval. These motions are submitted to the chair to be read and discussed by the group at large. They are intended to be a vessel for ideas directly from the members. Motions are usually written for the betterment of the society, such as the motion for a new card reader in the SGRC or the motion to have Leo's produce monthly financial reports.

However, there are those who abuse the system since people, in general, are idiots. If you've ever been in a first year class, arts class or worked in the service industry, you know that people are idiots. They ask stupid questions, give stupid answers and take ten minutes to order a coffee. People like this are responsible for the motion adjacent to this article/rant.

The motion to get a CSES Battle Hammer was passed by a majority vote at the Annual General Meeting. It was subsequently appealed and voted down by another majority vote.

It is also encouraging to note that this motion was seconded by the incoming CSES President. Well done, sir.

Abstruse Goose
www.abstrusegoose.com

Find spider the size of a mouse in your house ONCE...

xkcd **www.xkcd.com**

Check shoes before putting them on...

...for the REST OF YOUR FREAKIN' LIFE.

Put your hand down, put your fucking hand down.

~ Last Words ~

Uses For The Charlatan

- Wipe snow off your car windshield.
- Clean Jell-O or chocolate pudding off the Leo's floor.
- Plugging leaking nuclear reactors.
- Write in the white-space to make a scorecard when playing cards.
- Moving? Wrap your glasses in it so they don't break.
- Place on a park bench after it has rained or snowed.
- Donate it to Mythbusters when they want to build another automobile out of newspaper.
- Roll it up and use as a defensive tool against the dark arts.
- It lets artsies feel like they are contributing to Carleton.
- When you don't feel like cleaning up puke from that stupid roomate/first year, just cover it up!
- ~~You can read it.~~

Sleeper of the Month

As the year comes to an end, we are proud to announce our final Sleeper of the Month: Robbie Zuk. Mr. Zuk decided to get some shuteye during the recent EngLove trip, where an astounding twentyfour Carleton Engineers went down to McMaster University in Hamilton to trade knowledge, stories and beverages. As they were touring the campus and learning about all the history and academic standards of McMaster University, Mr. Zuk felt he needed a nap. What better place than a giant flat rock in the middle of campus? Not only did he have a great nap, but also got a nice tan. I'm guessing he went to the gym that morning and was doing laundry with fellow McMaster students that night. McMaster, we thank you for a great time.

* Sleeper of the month is entirely consensual and submission based. All people appearing in this section have given prior consent and have been informed in advance that their picture will appear here.

FEEDBACK LOOP

```
for statement = 1 to n
```

Wait, I'm not a girl? you mean my mom's been lying to me this whole time.

```
next statement
```

According to frosh training: "Young adults interact primarily through alcohol."

```
next statement
```

CUSA fees total $625.32 this year

```
next statement
```

So, I am walking behind two girls the other day when I overhear this: "I have a cup, I just need to find two girls"

```
next statement
```

So far this year, RRRA has spent $6769.78 on sex week. How come I'm still not getting any?

```
next statement
```

Our first years are a sexualized bunch.

```
next statement
```

If Tiger Woods caught Gonorrhea, would it be the Golf Clap?

```
next statement
```

"We're not here as professional cock-blocks."
- Campus Safety

```
next statement
```

Statistically, 25% of all grads that end up at the Honest Lawyer get kicked out in the first hour. Stay classy engineers.

```
end
```

Want to say something? Post to the loop at:
irontimes.engsoc.org

Upcoming Events - April

27	28	29	30	31	1 **Moonbuggy Race**	2
3 The first portable Cell Phone Call	4 International Day for Landmines	5 Cold Food Festival	6 Tartan Day	7 **Exams Start**	8 Draw a Bird Day (DABDay)	9 Vimy Ridge Day
10 Maiden Voyage of the Titanic	11 Juan Santamaría Day	12 Yuri`s Night	13 Lao, Cambodian, and Thai New Year	14 Black Day	15 Jackie Robinson Day	16 Harriet Quimby flies across English Channel
17 World Hemophilia Day	18 Champions Day	19 Bicycle Day	20 4/20	21 **Exams End**	22 Secretary`s Day/Earth Day	23 Canada Book Day
24 Vladimir Komarov dies	25 DNA Day	26 World Intellectual Property Day	27 World Graphic Design Day	28 Workers Memorial Day	29 International Dance Day	30 Bealtaine Eve

Watch out for the next

September

I thought there were jellybeans there!!