### ENGINEWS: an Endangered Species

Once again Enginews has shown the world that an undergraduate newspaper has full freedom of the press and as such is entitled to print as much racial, sexist and ethnic discrimination as it wishes, in whatsoever fashion it damn well pleases, and to hell with authority. In the words of the editor, now the ex-editor, "Engsoc tried to censor this issue, but I outsmarted them."

Enginews' previous issue had outdone itself with racial slurs, and had prompted protests from certain minorities and the Engsoc council. The council ordered that the magazine "delete all material which discriminates against anyone because of race, color, creed or sex. An amendment was made to exclude sex because "sex jokes are OK"."

In obedience to this order, the layouts for the July issue of the magazine were submitted for approval, and were approved. However the issue that appeared on campus was not the approved issue. Certain portions of the paper were changed before being printed. This included the front cover story of the bribery and corruption of Stan Packi, and the editor's protest of the censorship. Following the emergance of his hari-kari issue, Rob Murakami resigned as editor.

Enginews did improve the quality of their racial and ethnic "jokes" They said, "We're trying to discriminate against those groups still available on an equal basis." Following this credo the typical ethnic joke began, "Did you hear about the ETHNIC who..." At least it is an improvement. Fortunately, they also had run out of dead baby jokes.

The issue did have some good humour in it, which does go to prove that Enginews doesn't have to descend to it's usual brand of crude and uncouth humour in order to be funny. It does seem though that the plummers want that sort of humour. The editor had conducted a survay of engineering students to determine their opinions of the previous issue. Obtaining 302 responses he reported, "The results of the survey were overwhelmingly in favour of the last issue. A full 80% had no complaints whatsoever....There were 20% negative responses. But let me clarify this. A negative response was one which made a criticism either about baby jokes, racism, or pornography." All that can be said is that if people want this kind of a paper, they are welcome to it, but don't leave it around for my kids to read.

It is interesting to note that although the issue did follow it's usual sexist line, it gave a perfectly straight write-up of the 16 female engineers on campus. Perhaps Enginews feared the wrath of hitting a little close to home.

Editor's note: The previous article is the sole opinion of the author and not that of Mathsoc or mathNEMS. All quotes were taken from the July issue of Enginews.





One of the services provided by mathNEMS each term is the mailing of copies of the paper to all people interested enough to subscribe. This summer, we have a total of 52 users recleving brown envelopes with copies of this newspaper contained therein. This service is being offered again next fall. For a mere \$1.25 (we charge more for the fall because you get more) you can be kept up on all the action and happenings around campus. You get to read informative articles, entertaining features, enlightening columns, challenging gridwords and exciting fillers. It's all here for you, every week, so next term, don't be left out of the know. Subscribe to mathNEWS.

To subscribe, you merely have to go to the MathSoc office and find someone and say "I want to keep up on all the action happening here, but I'm off campus next term!". The cheerful MathSoccer you are talking to will reply, "Certainly, you obviously need a mathNEUS subscription for the fall." He will then take your subscription, a painless process that consists of (1) You give \$1.25 (to cover nostage and envelopes) to the smilling MathSoc person, and (2) He takes down your name and your fall term address. Alternately, if you don't know where you'll be in the fall, you can mail mathNEUS your name, address and money in the fall to: mathNEUS/MGC 3038/University of Materloo/Waterloo, Ontario N2L 361.

The \$1.25 covers only the postage and the envelopes. The paper itself is free, paid for by MathSoc funds. Just about anybody can subscribe.

NOTE: If you insist on giving us a cheque, please make it payable to ""athematics Society". MathSoc can cash cheques made out to "mathNEUS", but the people of MathSoc don't know this, and the subscription editor always gets a hard time from them.

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The next MathSoc meeting will apparently be held on Tuesday, July 8 in MC3011 at 4:30. Among other things it will consider a 6-plus page report on "the voting powers of off-term members".

In the meantime, summer directories are still available in the MathSoc office, if your friends still won't tell you where they live. You will also find that the blackboards in the office have been moved. This is because the central partition is soon to be removed.

MathSoc has also acquired an LSI green which a large number of people find quite amusing to play with.

Rumour has it that the last Anti-Cal meeting\* was virtually non-existent, making coordinator Phil Lanouette sole person in charge of everything.... We hear he intends to try. However, if no one shows up to help before he gets sick of it, then there won't be an Anti-Cal this year.... (ie. you can stop expecting to get one).

It has been suggested that Coffee and Donuts set up a complaint booth, thereby possibly diverting some of the frenzied masses from the main part of the MathSoc office.

\*no, this is not a kill the C&D manager meeting, that's next week.

# son of Full Duplex

### HALF DUPLEX

For those of you who entertain the idea of becoming grad students here in these hallowed halls of learning, it might be an idea to brush up on the local pecking order. Roughly, it goes like this: Faculty > high school students > model trains > grads > undergrads. This scale is generated from the all important, ever present factor of the B.I.U. (body-inuniversity). And if you are wondering about the model train's presence, you are not alone. So are the grads who were evicted from their office in order to make room for the model train.

Mind you, this is not your average everyday model train. The idea is to have this particular toy controlled by a Nova minicomputer, for the purpose of investigating such computer controlled systems, and (no doubt) to impress the hell out of future B.I.U.'s.

Speaking of which, a while ago we were entertained by the Junior Math Contest high finishers of yesteryear. True to form, they immediately found out (or were told) where all the games were on APL/360. Not that this satiated them. They then moved over to the 'bun in their neverending search for games. At one point, there were 17 of them on the 'bun - 7 playing chess!

Other than that, I am sure ( almost convinced ?) that they do come here not for

a "LONG Fed Report

There is not much to report in Federation. This is because once again a council meeting (for June 22) was cancelled because of lack of quorum. There have been a few executive actions to keep the Federation running. A report has been readied regarding Federation employees, a contest will be held to find a Federation symbol and logo, entries are invited and the winner will receive a \$50 prize. The pub in the Campus Centre is operating with less patrons now but Art Ram is trying to bring in big bands to improve business.

Regarding entertainment the Federation will be combining with Mathsoc and Engsoc to hold a big party with 3 bands on Sunday, July 6th. The party is at Columbia Field. Admission is free, all you pay for is food and refreshments.

Since prizes were mentioned earlier I shall bring up Lottuition (WE ALL WIN, NOUS Y GAGNONS) the Federation sponsored lottery in which the grand prize would be 8 months free tuition. Now the government hasn't approved the lottery (we may not get approval if they feel the Federation is not a charitable institution), but if it does it may run like the famous "Wintario" perhaps prizes dependent upon matching certain number and series combinations. (i.e. 3rd prize of 1 month tuition if the last 3 numbers match) It is an interesting proposition.

I now have official news from the Board of Education. Shane Roberts said there will be no Big Book this fiscal year and probably not next year either (it seems realistic not to expect one before 1977 or 1978)..... or perhaps 1984....Instead the Board will work with societies to establish and improve course critiques. This means that in Math's case a grant will probably be forthcoming to cover the cost of anticalendar.

games and goofing off, but to extend there interests in the field of Mathematics. It is one of the few programs supported by U. of W. which is not crassly interested in generating new students.

dents. Waterloo has struck again in the field of employment opportunities. The first International Brotherhood of Thaumaturgists (Local 1.5) has been formed here in this very campus. And to prove its relevance to the job sector, I direct you to our classified section. We would have had it copied in directly, but since the EMS photocopy facility (as well as the books) are off limits after midnight, this was the best we could do.

And some more (not surprising) news from the Gazette: 23% of first-year Engineering students (and I am using that term "students" extremely loosely) did not make it into second year. And if any of you got a look at the third page of the July Enginews, you will know what I mean. But that's not likely. Seems the exeditor managed to insert some of his most puerile material in It after the final draft was approved and before it got to the presses. There are now no copies left on campus as EngSoc carried out another clean-up operation on their "official" society newspaper.

2

A ROLLING STONE GATHERS NO



The new LOGIN subsystem for the Honeywell has been in operation now for a few weeks. The system has a more readable format for the header line that says "Hello, I'm the 'Bun.". For a few days, people were being informed that the date was things like the "20st" or the "22rd" of June. The implementation of the new system met with a torrent of gripes, including complaints about the way you are forced to change your password if it is not changed for a certain number of days, and the way you were forced to have passwords at least 6 letters long (now defunct). A password that looked like a student id (8 digits) was not allowed either. It would appear that most of these complaints stem from the fact people don't want to be told what to do by a machine.

Some day when you have nothing better to do, try responding to the prompt for the user id with your userid, followed by a line feed and a carraige return. (2741 users: sorry, you can't do this on your terminal (2BAD, as they would say in Hexadecimal)).

The APL terminals of the third floor terminal room have finally been taken away. (They were out of action for a few weeks, having been gift wrapped with blue ribbons.) Also, I have been informed that the file system feature of APL will be no more after the end of the month (on the /360, that is). It seems that the lath Faculty is scaling down their support of this Computing Centre service.

Users of the Honeywell have noticed a few new userids turning up in their MUSER listings. Two of these are LABATT50 and LABATTBLUE. It turns out these are users from Labatts who are upgrading to a 6000, and the company figured that as long as it was here, it wouldn't hurt to get a little free advertising.

This week, due to popularity, we are featuring two INTEGER\_GF\_THE\_WEEKs. The first number is a valuable aid in writing obscure programs, useless subroutines, and kludgy procedures. So here it is, our first INTEGER\_GF\_THE\_WEEK:

91

Now, we present a function for generating this INTERER\_DT\_THE\_MEEK for programmers who need it, but whose system doesn't supply it as a built-in constant. A number of systems supply some special constants (e.g., pi is supplied on APL, you can get it with omicron followed by a 1). Noveer, not all systems supply needed constants, an the user may have to write a function to generate the number. So, for those users whose programming language fails to supply this integer, we have the following function to generate it:

F91 (NUMBER) <u>begin</u> <u>If</u> NUMBER > 100 <u>then</u> RESULT := NUMBER - 10; <u>else</u> RESULT := F91 (F91 (NUMBER + 11)); <u>return</u> RESULT; end This recursive function returns 91 for any integer less than 100.

Our second integer is published by popular demand. Our second INTEGER\_OF\_THE\_VEEK is:

This integer is one of the only two integers that are still integers when inverted. (No one has successfully proved a 6 becomes a 9 when inverted so that doesn't count.) It is not really prime, but not really composite. It is an identity in the ring of integers, and is the largest integer that is next to zero. This integer is really quite useful, so it is supplied in most systems, but just in case it isn't, we provide this function for generating it:

F 1

(NUMBER)
begin
$\underline{\text{if}}$ NUMBER := 1
then RESULT:= 1;
<u>else</u>
<u>If</u> NUMBER is even
<u>then</u> RFSULT := F1 (NUMBER / 2)
else
RESULT := $F1 (3 * MUMPER + 1)$ :
end

This recursive function returns 1 for any positive integer. (For negative integers, it tries to return -1, on 0 it recurses forever.) Although this function "cheats" (there is a "1" inside the program), it has the interesting property, that no one has been able to prove it will return 1 for any arbitrary integer, however, no one has found a counterexample (i.e., there is no positive integer to make it recurse forever.)

As an added bonus, this week we are going to present a GAUSSIAN\_INTEGER\_OF\_THE\_WEEK. A gaussian integer is a complex number with integer coefficients. (e.g., 2+31 and 10-61 are gaussian integers, but .5+3.11 aren't.) This week's GAUSSIAN\_INTEGER\_OF\_THE\_WEEK is 1+1

This number has the property of being the "smallest" gaussian prime number. (note, the prime integer 5 is not a gaussian prime, 5 = (2-i) \* (2+i).) Gaussian numbers, like all complex number, have no ordering defined, so in this case, the size of the number (A+Bi) is defined as A\*A + B\*B. (Or more correctly, sqrt(A\*A + B\*B).)

(Just an opersvation) It seems boff has been replaced by bunnie. Normally, I'd make a snarky remark about rabbits in general (and all those rappits in last week's paper in particular) but for a various reason, I won't.

A closing thought: "University" said backwards is "It is revenue" (more or less). Spelled backwards, it is "ytisrevial".



2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 1 M Α 14 ß С 1 4h D I) E HI WAR i H F  $\Delta R \Delta$ Ŋ UH. G Ul la H HIEROGLYPHIC Η 1 ALPHABETIC 4 1 not kocher a1 14. NUMERI C Т recline a2 1 аЗ carry ĸ one hole a5 Î. L a6 cornses U a7 made by coral Μ a8 neuter 1h N come to pass a10 1/ a11 unset 0 one who has a mania a13 P Sums a14 a16 difficult Q a17 tips Bof R flbbed a18 5 a19 a soc two vowels h12 c4 christmas **d**8 swiss song d15 stringed mimic e2 a common base **e**9 e12 an island a biting fly e19 f5 simply a definite article f14 f18 a mania g7 wedded art (latin) ň4 council of upper canada hő north-east reversed h10 h11 toss hunting an exclamation h13 **j**1 11 a young person angled **j**4 complete 12 j11 good (latin) building pleuiscite 19 116 royal vaulting team 116 vase k1 117 small amount k7 dive backwards wrong a1 mother had a feeling k12 an excinct car j 8 lower extremities j12 to draw out a13 french cuff 11 most (suffix) 114  $\mathbf{b1}$ ran backwards 16 a reversed gas colored k3 shelley was one pains 55 111 k15 bonev leading 510 m1 large shoulder covering a monkly vow 14 b16 a waterfall mб suicide capsule 16 vinegary m15 saint c1 a nore 111 chaos с9 windward m18 at the pottom of the barrel puzzles 119 leveled c16 n 2 rank inform it's found underground m10 d3 nЭ m16 tie up dad d10 n14 fear In the direction of display neuter (2 vd.) m18 d13 declared 01 crown n5 slack 80 airy e1 right n17 inner secret 015 not safe еG landlord o1 portion e15 a digit p4 ο8 first man eight legged cat f1 eve's fruit p10 blg\_\_\_\_ It comes in first 013 trouble f 8 marks of a blow p18 elebhant's baggare catch p12 flh **1**P p14 hurt n5 swish **71** new a girl's name 57 p18 surface a 3 liome charged particle comfort n2 r14 hurry q12 dummy war paint h3 scamp r1 not not not a one-celled animal a9 one twice r7 h10 not them Heffner's hobby n17 r17 h13 and they make lightbulbs peculiar to a district r4 s1 it's symbol is Y 11 not q5 across r7 sУ middle ear it buobles 19 r11 before most as 115 s18 grasps 4

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## A TWITCH IN TINE SAVES DIME

## GRIDCOMMENT

For all you 240A students interested in extrapolation. The following table represents data to use for a linear fit to project the submissions and number correct for this week's gridword:

grid size	number of submissions	number correct
187	38	26
225	7	5
361	(-56.76)	(??)

As you can see, we have done half the work for you to check your results. You don't have to be taking 240A though to try this.

taking 240A though to try this. Of the seven entries this week, four were from out of town. Lets hear it for Toronto(2), for Ottawa(2), and for good old Uniwat(3). (We should only count Toronto for 449/225-ths if we include Mark Brader) This week's lucky? winner is Diane Mitchell who is currently batting .500. Eat your heart out Owen, you are down to .291. Mark Brader was proud to inform us that he

Mark Brader was proud to inform us that he is moderately vital.(anybody want to take him up on that?) Tom Sipos' vital signs are as follow: b.p. 120/80, respiration 45, with breathing hard and laboured. Either he is about to deliver or he is still working on the conception.



matn NEUS:

I did not get a cony of mathNEUS this week because on friday afternoon when I went to get it they were all gone. Can you maybe publish more each week? I know that there are others with this problem too!

Doug Brown

5

(Would you believe that the issue came out on Thursday morning. We are printing more conies this issue but it might help if you got up before noon on Friday to get to your 8:30 class. Better luck next week. :boff)



MathNEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but if requested, a pen name will be used. Put your Feedback article in our mailbox on the 3rd floor outside the lounge, or mail it to us on the. 'Bun (userid mathNEWS), or take it to MC 3038 and have it put in our mail slot or put it in the mail addressed to mathNEWS, MC 3038

I read with interest your article on the change from a "funny money" to a "real money" charge for computing, by both the Computing Centre and the Math Faculty Computing Facility, and the subsequent limitation of access to computing for some students. When the Computing Centre was requested to incorporate full accounting into the DEBUG service, it was feared that many students who had been using the computer, but who were not registered in a course that supplied them with a computing account, would be denied access to the computer. For this reason, last summer the Vice President (Academic) established a special fund called the Casual User's Computing Fund. This fund provides some access to the computer for anyone who is unable to obtain an account number through the usual channels.

Some typical examples of legitimate reasons for being granted a Casual Users's Account:

- 1.A student who wishes to use the computer to complete an assignment in a course for which no provision has been made for a computer account.
- 2.A student who wishes to increase his/ner knowledge of computing.
- 3.A staff member who wishes to gain an expertise in computing.

Normally, these numbers provide access to DEBUG or APL, but if a student's computing requirements are such that they cannot be met by either of these two services, the number can be extended to batch or CMS.

To apply for a Casual User's Computing Account, please see either:

Roger Watt extension 2183 M&C 2007 or Carol Vogt extension 3270 M&C 2005

Casual User's Accounts can be obtained with a minimum of red tape. If you just need DEBUG, you can have your number immediately; if you need some other service you will be required to wait until the next day. The fund is limited, and it is on a first come, first served basis.

#### Carol Vogt



C.S.C. News:

I may be able to explain away that flasco of a non-meeting on the 24th of June, but not until I see my lawyer.

In lieu of the usual C.S.C. report, I give you an article about the resident computer chess fanatic (which the C.S.C. has not been able to impede despite valiant efforts).

The U. of W. based computer chess fiend, TREEFROG, will be exercising its killer instinct in the near future. The first stop on its summer agenda will be its Canadian title defence in the Second Canadian Computer Chess Championship scheduled for August 1st-2nd in Calgary. After this, it is then scheduled to come out into the real world of chess players and compete against human opposition in the Montreal Labour Day weekend tournament. For those of you to which this means anything, the program, although computer chess champion of North America, is classed as a class 'C' player at best. It will probably get stomped in Montreal.

After this, in mid-October, it will be travelling to Minneapolis (under the care and guidance of its principal author, Ron Hansen) to defend its U.S. title against the best of the U.S. programs. Most notable of these is CHESS 4.0 from Northwestern University, only previous winners of the title, until last year's tournament in which we were victorious.

For those of you who remember 'Fish Market', we present the following computer chess game from the U.S. tournament of last year between CHUTE 1 (from the University of Toronto) and Xenarbor IV. Those who wish to can compare this game to mathNEWS'S last published chess game.

		CHUTE Xenarb	-	IV
4. 5. 6. 7.	P-K P-Q N-K P-Q B-K O-O P-Q	B4 B3 3 2 N3	P-Q N-Q P-K N-K B-K D-Q	B3 4 B3 2 3
8.	B-0	N 2	8 <b>-</b> K	3

In true 'Fish Market' tradition.



12. B-Q 13. R-Q 14. P-Q 15. R-Q 16. Q-K 17. Q-Q 18. R-N 19. R-K	2 P-KR3 5)-B3 B-K3 B3 Q-N3 N1 Q-R3 R4 QR-QB1 R1 P-QN3 L KR-Q1 L R-KB1 L KR-Q1 L R-B1
20. K-B	

Vintage 'Fish Market'! But is one of them really Mark Shields?

Q-N2

**OP**\*P

N-Q2

Q-R3

KR-B1

KR-01

R-81

QR-Q1

. . .

21. P-QN4

22. NP\*P

24. B-QB3

25. B-0N2

26. B-QB3

27. P-K5

28. N-K4

23. B\*P



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29. R-QB1 R-QR1 30. Q-B2 QR-Q1 31. B-Q1 QR-R1 32. R-K2 QR-Q1 33. Q-Q2 R-R1 34. K-K1 QR-01 35. Q-K3 Q-B1 36. N-Q6 Q-R1 37. K-Q2 • • •

In true 'Fish Market' style, White maneuvers his King into the centre where it has no right to be!

Truly, a 'Fish Market' game.







## ALLSTAR BALLERS COME THRU

In slow pitch action Wednesday night, a bolstered crew of Mathies were humbled at the hands of the CAMPUS ALLSTARS. Although the Math "STUMBLE BUMS" only had a turnout of 6, the Allstars generously donated their star (\*\*\*) pitcher J\*U\*N\*G\*L\*E J\*I\*M (lately of Tarzan's Tigers of the A.L.) and three other players (who remain anonymous since their lack of knowledge of baseball's fundamentals fills volumes).

The Allstars (WE WON BECAUSE WE WON BECAUSE WE WON......) led by TEEKERS (with the quick hands behind the plate) trounced the scoundrels anyway. ALLSTAP batters found holes in the tight infield (S.A. finger(s)) that no one knew existed.

This week, of the Dynamic Duo, NEVERGREEN outshone EVERGREEN as the man with the Golden Glove snowed that even our infield vacuum cleaner doesn't pick up the dirt all the time.

Nevergreen, however, brought cries of "Look at the arm" with pinpoint accuracy of throws from deep right field ("But we haven't got to the arm yet").

Our female contingent showed once again that they may not be able to hit but they sure can swing (PAULINGG says "Our team sweaters should be halter tops, who can keep a t-shirt on in this weather???").

And finally, the GOLDEN BALL OF THE WEEK AMARD goes to Teekers, for who else can smoke and play catcher at the same time.....



mathNEWS will print your Ads FREE of CHARGE. Just jot them down on a piece of paper and put it in our mailbox on the 3rd floor across from the C&D lounge, or take it to MathSoc and have them put it in our mail slot, or put it in the mail addressed to mathNEWS M&C 3038, or send them in the mail subsystem on the 'Bun to userid mathNEWS.

<u>PARTY</u>: to be held anytime to celebrate dats absence. (signed) his adoring fans?

HAPPY BIRTHDAY to all Randalls with birthdays on July 7.

<u>CADAR ORGANIZATIONAL MEETING</u> An organization meeting of the Canadian Anti Defamation Association of Rabbits will be neld on Saturday July 5. Hop to it and come on out cause it will be a hare-raising experience. contact mabun via the Honeybunny for more details.

#### **RESIDENT THAUMATURGIST:**

The Artificial Intelligence Department of the Institute for Advanced Thinking, Big Sur, California, has an opening for an experienced thaumaturgist to assist in speech understanding research. The position entails taking scle responsibility for the design, implementation, and maintenance of a clairvoyent subsystem to bolster, and eventually replace, existing programs for acoustic-phonetic recognition. programs for acoustic-phonetic recognition. Applicants will be required to demonstrate proficiency in glottomancy, perplumbaureaticn, transmurambulation, and related skills. Necromancers need not apply. For further Information, conjure up the Director, AI, Department, Institute for Advanced Thinking, Big Sur, California. We are an equal opportunity employer.

mathNEWS is a weekly (fortnightly in the summer) publication, published on campus at graphic services. mathNEWS is financed by MathSoc fees, but is independent of MathSoc, and views expressed represent those of our staff and contributers only. mathNEWS is created Tuesday nights from 7:00p.m. onwards in M&C3011. All contributions, feedback, ads, or help in putting it together is welcome... if you're

circulation this issue 550 with 52 subscribers...next mathNEWS night is Tuesday the 15th, next issue out on Friday the 18th...this will be the last regular mathNEWS of this term...

the time is now 7:07 on Thursday July third...despite appearances we didn't really spend 32 hours preparing this...we started Wednesday nite, It just feels like 32 hours...at this time the three semi-survivors fondly recall the golden moment at 4 o'clock when we decided to expand from eight pages to six...(or vice-versa)...one of the turkeys says he's late for breakfast... did you know that it took 7200 seconds of cpu to calculate 711? ...the contribuotors of this epic journal (in pseudo random order)... first star jjlong for leaving us his column a week and a half ago... mick rooke for his waffling commentary in 'Return of Fish Market' (pcssessor of many great fins)...prrenial procurer...

...next, in order of decreasing insignificance...the conspirators for the eve/night/morn...(metre)cal barrett...rag(weed)white...mike(descending)rose... a bird in the hand is worth two in the BURLOAF...dave(who trusts that bunny and boff are in separate beds)...ludwig von zopfault (no relation to the san andreas fault)... and the incomparable, indestructible, inedible randall S. mcdougall...

We roffed and we boffed and we blew a whole night's sleep(but the 'bun's still up)... mathNEWS unconnects