

## MATHSOC

Once again we were sitting in the lap of luxury in M\&C 5158 for our illustrious Mathsoc meeting (open to one and all), held every other Tuesday at $4: 30$, unless otherwise posted. It looks as if we will have this opulent setting for the rest of the term, so drop in on the meetings if you get the chance.

A fair amount of business was accomplished, with an outline of the procedings as follows:

* John Denham, our Social Director, gave a report in which he proposed organizing a bi-weekly pub, somewhat like the Welcome Back Pub, with provisions for changing the theme, of which square dancing was one suggestion. Funds for these bi-weekly pubs were allocated by the Mathsoc Council.

The first of these pubs will probetw
 Faculty Lotnge, MeC 5136. Music is by GHOST (tuns inc). Mone on this to coris.

Another activity planed is a MathEngineer Eeach Party to be held on Sunday, July 11 at Columbia Field. More to come on this event, also.

Other events were suggested, to be planned out further in the term. Any suggestions to make your summer more enjoyable would be appreciated.

* Steve Risto was ratified to the Education position as well as holding down the Internal Affairs post.
* Andy Haycock, long time MathSoc member, who graduated last term, was given an Honorary Lifetime Membership to the Math Society. Among other things, Andy is best remembered for portraying Santa Claus at our annual Christmas Party for the past 5 years.
* A motion to reinstate a smaller version of the Pink Tie as the MathScot was tabled until the next meeting to provide an opportunity to find an alternate symbol for our MathScot. More on this elsewhere in this issue.

The fee increase (?) reported in the last issue of mathNEWS is no more. It seems that last term's council only put in a
notice of notion for the ace increase. These bright fellows than neglected to bring this up in suceeding meetings, so it was left over for this term's council to deal with. Crusading Ron Hipfner brought forward a motion to dismiss any further discussion of ree increases this term, which was passed.

* Considering Gary Dryden's workload with the Feds, and his generous offer to organize MathSoc's portion of Orientation, MathSoc Council passed a motion to take on this burden themselves, retaining Gary as a consultant, due to his extensive involvement in orientation in the past.

A new budget was outlined at today's meeting, but there are still some adjustments and approvals to be made.
*T-SHIRTS! (again!). There seems to be some dissent among the ranks of Mathies-at-large about the designs on the last batch of T-shirts. There have been rumors that some Mathies prefer the small crest to the large symbols. Therefore, Andy Mueller, 1-b rep, has been appointed as T-shirt co-ordinator. Please direct all comments, designs, objections, etc. to him via MathSoc.

## an elastic split level



## Mathies:

OUCC

Mathsoc is looking for three math students interested in representing math on the Student Advisory Council to the Department of Co -ordination intended to be "small, loose and informal," holds meetings on an "open" basis advises the Department of Co-ordination on matters of importance Council members and the students they represent. Anyone who is interested should contact Steve Risto at Mathsoc.

## again

> Steve Risto

Director of Education Math Society

We, the undersigned, feel that something MUST BE DONE about the condition of the tables in the math lounge (MC3001 and MC3002).

The above petition was received by mathSoc with 39 signatures attached. MathSoc has forwarded the complaint to the appropriate authorities and is currently waiting for a response.

The Ontario Universities Computing Conference will be held at the University of Waterloo. So if you notice any large crowds on June 2nd, 3rd and 4th then you know who to blame.

Some of the activities will be discussions about computer aided instruction; micro, mini, midi computers in the University; applications of minicomputers at Waterloo, et cetera. At night there will be several demonstrations and presentations (which caused WATSFIC to be booted from MC5158 to CC110 on June 3).

If you are interested in any further information write:

Roger Watt, 7th OUCC
Computing Centre
University of Waterloo
P.S. If you do decide to register $\mathrm{it}^{\prime} \mathrm{s}$ $\$ 50.00$ for 3 days and 4 meals.

## NOTE Preregistration

All co-op students who are returning for the winter of '77 (or hope to) should pre-register on May 26-28th. mathNEWS has listed the times for pre-registering on Thursday and Friday. If the area you want is not there, then it occurred on Wednesday.

ALL Ib Students going inte 2a<br>Thursday, May 27<br>9:30 to 11:30am MC5158<br>1:30 to 03:30pm MC5158<br>Friday, May 28<br>9:30 to 11:30am MC5158<br>Those entering 3rd and 4th years.<br>Co-op Teaching Option (R, Dunkley)<br>Thursday, May 27<br>10:00 to 11:30am MC5103<br>02:30 to 03:30pm MC5103<br>Statistics (C. Springer)<br>Thursday, May 27<br>09:30 to 10:20am MC5039<br>C.A. \& Business (J.D.Kalbfleisch)<br>Friday, May 28<br>10:00 to 12 noon MC6092a<br>01:00 to $3: 00 \mathrm{pm}$ MC6092a


sir risto reports

Recently, a matter has come up which is of grave concern to all of us who hold high our pride and tradition as Mathies. For our beloved Mathscot, The Pink Tie, is endangered by a demented bunch of degenerates who wish to break our ranks. Yes, as hard as it may be to believe, a stacked Mathsoc council is considering terrible proposals regarding Pinkie.

Originally the idea was to create a new smaller ( 25 ft ) version of the Pink Tie which would be more versatile and could therefore be displayed more often. However, they wish to make the new Tie a rose colour instead of the colourful shocking pink we now have. Besides the new colour (the present colour is by far the best), I personally agree with this idea as our symbol would then be more visible to the masses. I believe that we could then keep the old 80 ft version in a safe place and rarely take it out (in the same way that the N.H.L presently handles the new and original Stanley Cups). However, a movement is now afoot by an enemy within who wishes to destroy the old Pinkie. There even have been ideas put forth to do away with the Pink Tie idea altogether.

When a group destroys their traditional symbols they destroy themselves. Thus we must defeat these persons before they go too far. In this connection, questionnaires will be set out in front of the lounge next week concerning the Pink Tie. Arise! Defeat the enemy within! Return the Pink Tie to its old glory by filling out the questionnaire appropriately!


RESPONSE

As the aforementioned personage 1 find it necessary to take offense to those slanderous and derisive comments. Not necessary to get personal is it?

My argument is that the pink tie is a silly object about which to rally. At this particular moment I/we haven't come up with a suitable alternative but is that any reason to bring back that ludicrous object - to love and cherish and fight for? (Rally 'round the PINKIE, Boys! Let's do it for the PINK. Remember the PINKIE. yecch )


## ... SIR R.

Moving on to other matters the "Welcome Back" Pub of Friday the 14th was a great success. As noted elsewhere, Mathsoc is planning biweekly pubs of the same type during the summer. I hope that you'll all turn out and make this summer a fun one.

Note to Kathy-X: You should have stayed, as we had the place filled to capacity for most of the evening and it didn't break up till around 2:00 a.m.

## The Answer Burloaf

## Dear Answer Burloaf:

Before, I used to lead a boring life, going to classes, etc. but recently 1 discovered computers and now my life is sheer joy as I spend all day signed on to a CRT terminal. One thing worries me though, isn't all the radiation given off by the TV sets bad for me?

Ivan P. Strombsic

## Dear Ivan:

Ordinarily, radiation would be a hazard. However, studies reveal that the normal diets of most people contain enough additives, artificial flavours and colours and preservatives that they have, by adulthood, built up enough lead and miscellaneous elements in their bodies to form an effective radiation shield. (In fact, Hacks, because they eat large amounts of Canteen of of Canada food, are particulary resistant, which for them is a good thing.)

## Dear Answer Burloaf:

I like to play my stereo fairly loud, but I live in an apartment and I don't want to bother the other tenants by subjecting them to sounds they don't want to hear (After all, they might phone the superintendant.). How can I find out if my sound system bothers them?

Foster Iznac

## Dear Foster:

There's a simple way to find out. Merely play your stereo full blast for about three days with your favourite music. Then keep it turned off for a while. Now if the neighbours phone up telling you the music is great and demand you play more, you're home free. If no one phones, then the neighbours probably like different kinds of music, so perhaps you'd better switch to something else.

## Chevron Response FEEDBACK

## Letter Editor;

I am writing you to correct some of the statements made by the chap styling himself as "Sir R." that would tend to throw some doubt as to my objectivity as a Chevron staffer. Your writer attacks me, because he states that I claimed that an electronic detection system was an invasion of privacy, was of little value because it wasn't $100 \%$ foolproof, and that stealing library books was an acceptable practice. I find these charges to be unfair and unfounded, especially in light of the fact that the author admitted that the Chief Librarian thought that my article was "reasonably accurate" and that he was "not unhappy with $\mathrm{it}^{\prime \prime}$.

In the article I mention that library losses through stolen books are escalating rapidly; that the Kitchener and Guelph University Libraries are both quite happy with the machines' performance; that Guelph's machine has cut losses by 6/7ths; that Kitchener reports similar savings; and that present methods of detection seem to be inadequate. I never made any statement that the system was an invasion of privacy. I did note that some of the students did in fact feel that this was so, and I challenge anyone to do an objective survey of students on this question without finding a significant group who agree with that perspective. However, I mentioned this in one line of an article that was composed of approximately 150 lines. To conclude that I slanted my article to claim that such a system was an invasion of privacy is a gross exaggeration.

I also noted that virtually every official in charge of such a system went out of their way to point out to me that the system was not foolproof. Mr. Porter of Guelph stated this to me almost immediately after I introduced myself on the phone. Mr. Mathews of Kitchener was also moved to stress this point. The system's shortcomings were documented to me at length by Mr. Shepherd of UW. It may surprise your author to be told that an objective reporter attempts to credit his/her readers with enough intelligence to realize that if three highly experienced sources agree on a point, then that point is likely to be not only accurate, but important as well. Not once in the article did I personally express the opinion that this defect (if it is such) made the system to be of little value.

The most serious charge "Sir R." made, and the one I found to be outright slander, was the one that claimed that 1 endorsed ripping off the library. Does your author know that advising persons to break the law is a criminal act in itself? In
effect, your author is claiming that I committed a crime myself. I suggest that you editors read the libel laws of this province very carefully.

When I decided to write this article, I could have concentrated on its most superficial substance, i.e., the system itself. However, I feel that good journalism has not only a descriptive function, it has an explanatory function as well. In other words, it is incumbent on the reporter to go beyond simply telling what is happening, and to try and provide the background information that a reader needs to piece together for him/herself why that phenomena has occurred. If the university states that it needs an electronic theft-detection unit, then that means that stealing is more of a problem than before; my function therefore is to find out why students were stealing. Rather than print up my own opinions on this issue, I used bona fide, real students, and cited my sources whenever I quoted them. To claim that I endorsed their views is to confuse the writer of an article with his/her sources.

I would like to point out that I could have simply talked to the proponents of the system in question, and left it at that. However, to do so would be tantamount to becoming a mere publicist for the libraries. Therefore, I not only investigated the advantages of the system, I tried to find out if there were disadvantages as well. To do otherwise is to confuse journalism with propaganda.

In Sir R.'s article, he made no attempt to canvass consumers of library services on their attitudes with regards to the system. In addition, he made no real mention of the concern Mr. Shepherd has expressed - in a library publicity release that has been posted on its public bulletin board - on the public relations implications of such an installation. The only new facts that your writer cites are not substantively different than mine.

There is an exception, however. We both agree that the system will cost $\$ 90$,000 to install. However, Mr. Shepherd informed me that the system's upkeep would be around $\$ 7,500$ per year, and that losses amount to a maximum of $\$ 30,000$ per year. "Sir R." reports that losses amount to $\$ 90,000$ a year, and that the upkeep costs about $\$ 39,000$ a year. This is the only serious discrepancy between your article and mine. I suspect that this is due to some confusion at the source of our articles, rather than our reporting of it. This probably indicates the difficulty of writing truly objective articles, more than anything else.

One final remark. If something is worth writing, it's worth crediting. Whenever contenious material is being printed, I feel the publishers have a responsibility to come out with it as an editorial, or mention the writers's name, especially when he/she is attacking someone else. I personally would like to
know the identity of "Sir R.", because he has deliberately impugned my personality. I request this not in order to intimidate this person, but simply because this is a common courtesy in printing. public materials.

Recently, there has been quite a bit of criticism from sections of the UW community with respect to the Chevron's credibility and objectivity. I disagree with most, if not all, of this criticism. However, it indicates to me that some of the Chevron critics are motivated by a healthy interest in the campus press (although there are elements who have not desire to engage in any but the mose destructive of polemics). As a result of this criticism, I have made a special effort to be scrupulously honest in my reportage of news stories. That I am not totally successful in this is to be expected, in that I am only human. Wherever I fall down, I welcome constructive criticisms. But when this takes the form of overtly attacking my veracity, 1 am sure that you and "Sir R." can understand my chagrin. I submit to you that an apology, plus the publication of Sir R.'s real name, should be included in the next mathNEWS edition.

> Respectfully yours, Mike Ura

## SIR RRRRRRRRRR

As you can see from the above letter in this week's Feedback, Mike Ura of the Chevron has reacted rather strongly to my column of two weeks ago regarding his reporting of the new proposed library detection system. I would now like to point out a few facts and to clarify myself in several areas.

Firstly I would like to make it clear that 1 am not criticizing him about the factual content of his article. He included most of the relevant facts about the proposed system, although I do believe that he could have added more such as the fact that, with the new system, searching will no longer have to be done at the door. Also I don't wish to quibble about the costs of the system. I have the breakdown of the costs associated with each area of the proposed system. These figures are the best which the library can provide, given the present circulation system. However, this is not my point either.

Basically what I am saying is that the article on the front page of the Chevron was slanted against the proposed system, playing down its good points and unduely emphasing to distortion its few bad points. As I say, most of the facts are there, however, it's the way that they were presented as a whole which draws my criticism.

I personally believe that the proposed system provides many benefits. Students
will no longer have their purses, brief cases and other belongings searched as they leave the library. Certainly the present system is a great invasion of privacy when compared to the new one. I note that it appears that my view of this is shared by the overwelming majority of Mathies as expressed by the survey reaults shown elsewhere in this issue, of which out of 108 returns only one person believed both that the proposed system is an invasion of privacy and that at the same time the present system is better. And this is only one of the benefits. As stated in my previous article, actual savings will amount to at least $\$ 50,000$ a year and better services will be offered by the library.

I certainly don't mean to imply that Mike Ura is condoning the practice of stealing books from the library. My feelings in this area are that although I have sympathy for students who have a hard time accessing or paying for their books, I have absolutely no sympathy for (indeed I show outright hostility towards) any student who beieves that stealing books is the solution to their plight. There is no place at this university for such unthinking persons who are ripping us all off. I feel that this view, held by most students I am sure, should have been reflected in the Chevron article.

I have spoken with many persons regarding these matters, both library officials and other students. Our consensus seems to be the same regarding the Chevron article. I believe that the Chevron's article was slanted and have attempted to correct that. I believe that my assessment is correct and I stand by it.
[As editor I'll just say a few words to confuse everything and settle the whole issue. Steve Risto has asked me not to reveal his identity so you won't get it out of me. Anyway I back up everything that $\operatorname{Sir} R$ has to say (except perhaps his views on extra-marital sex. Or for that matter he and $I$ differ on the question of aid to homeless hacks, and can't see eye-to-eye concerning the future of the dirigible. Actually he isn't right very often at all now that I think about it...) Back to the point though: the chevron article did come across slanted to me, hence the mathNEWS version. Mike Ura have talked this topic to death (and I'm getting tired and wanna go home) so let's put it to rest. - hugh]


flat out
la To cat $\operatorname{speak}(2,5)$
ii XI * XVI * VI (7)
2 a a last in every issue( 1,8 )
$2 k$ age of mathNEWS(5)
3a what antiCal allows students to do about profs(4)
$\mathbf{3 g} \quad$ a cigarette is dangerous only if it is (3)

3k M\&C opened(5)
4b a time era which most co-op students
on campus survived $(3,4,2,4)$
5a Elora Highschool(3)
5e grocery chain(2)
5h mid-hurricane(3)
51 the only one(1)
50 first person(1)
6 what you breathe in a snowstorm $(5,3)$
6 j 'they come during sleep(6)
7 a secant of alpha $(3,1)$
7 f also(3)
7 j left after Eatons(5)
8a hamburger and root beer(2)
8 d to locate $(2,4)$
8 k math group(3)
80 simplest element(1)
9b female(3)
9 f male 1975 slogan(1)
9 i smarter than your average $\mathrm{n}^{\prime} \mathrm{jineer}(3)$
9 n a Chinese measure of distance(2)
10a many ships leave them(5)
10 g construct(4).
101 point of a bird(4)
$11 a$ a level open stretch of land for
travelling(9)
11k summing (5)
12a NOTE WELL(2)
12d fake butters(5)
12j Olive centre(3)
12n and(2)
13a deep natural pits each having a pool
at the bottom(6)
13 i sister goddesses(5)
130 the British are silent(1)

## GRIDWORD COM MENT

We had 6 entries this week of which 6 were correct. So we tossed a die and the lucky roll was a four. This made MICHAEL FINE a winner. Other correct (but not so lucky) solutions were submitted by Mark, Ray, Bruce, Owen and Dave.

Of all the songs submitted, the one by Owen was considered the ????!. Judge for yourself. It's a Sine of the * ${ }^{*}=$ multiplication $=$ times)

Deadline for this gridword is FRIDAY JUNE 4th. Any of our fifty-odd subscribers are welcome to try ( 3 did in our last grid). Just toss it in our 3rd floor mailbox across from the Information Window or put in our mailslot in MC3038 or mail it to mathNEWS, MC3038, University of Waterloo, Waterloo, N2L 3G1.

Special WARNING about this grid it uses ALPHA-NUMERICS. In other words part of the grid contains numbers (such as 1000AEB, 001976). But don't let that scare you off, it's easy to find which section has numbers and the numbers are limited to base 10 and base 16 .

Gridword creators can submit their creations to mathNEWS. If we use your creation you get your pick of a genuine $t$ shirt from the mathSoc stock.

John passed this one on to me. PROVE: $1+n$ is always zero. PROOF: $\mathrm{ONE}+\mathrm{N}=\mathrm{N}+\mathrm{ONE}=\mathrm{NONE}=\mathrm{ZERO}$
14a an equal prefix(3)
14 e a mathNEWS default option(6)
14 k full of zest and vigour(4)
15 a fortran logical operator(2)
15 d what are you doing now(8)
15 m peace(3)
IT SHOULD BE NOTED THIS IS AN ALPHA-NUMERIC GRIDWORD...


## bunch of arrows pointing down

a01 $\cdots$ sticky and black(3)
$a 05$ a Simcoe County township(4)
a10 many students take from antiCal(6)
b01 when asked about the best paper on
campus $(1,8,2,4)$
c01 MC3038(7)
c09 hip(3)
c13 Negative(2)
d01 Me $\operatorname{look}(1,3)$
d06 Napolean made famous(8)
d15 FBI type of man(1)
e01 where you are(2)
e04 girl's name(3)
e08 breathable element(1)
e10 person who uses a salt shaker(6)
f01 surprise!(2)
004 popular with students(6)
f11 My requirements in reverse $(4,1)$
g01 Supply water, oil or gas(4)
g06 a paper loan(3)
g10 the little red book's inner being $(4,2)$
h02 plane part(7)
h10 unclassified (3)
h13 Anti-gravity effects your __(2)
101 After Christ came Mattel $(2,3)$
$i 08$ Grab(4)
$i 13$ from a cow's mouth(3)
j01 An arabic, not roman, numeral(1)
$j 04$ Occupants of the CC(4)
j09 Take a colder direction(2)
$j 12$ From a contented cat(4)
k01 The U.N.(4)
$k 06$ what the mathNEWS staff need on
Wednesday(4)
k11 Your parent's daughter(3)
$k 15$ no longer living(1)
101 1646527(8)
110 One who bites(5)
m01 2 more than an arts $A+(4)$
m 06 what the worm is $n^{\prime} t(3)$
m10 For Example(2)
m13 Rises in the spring(3)
n01 Pension for everyone(4)
n06 Female who is not married, single or otherwise(2)
n09 $\operatorname{Limp(4)}$
n14 Can you account for this group of mathies(2)
001 Remove the floor from mathSoc(3)
005 Verbally common(2)
008 What you say when you see someone coming at you with
a chainsaw in her hand $(2,6)$

## BASEBALL SOCCER

Those glorious gladiators of the hallowed halls of higher learning (math of course) are at it again. In quick succession the MATH SOCCERS devastated a prostrate (and missing) GOLDEN GUYS; and MATH (mathletics own men's competitive softball team) overwhelmed a team singular by its absence. And there you have it, oh avid MathSport fans, 2 victories, no defeats, no ties and unfortunately, no games.

It's unfortunate that a team such as the GOLDEN GUYS (who have within their ranks one of the best players in the $A$ league plus a contingency of 18 players) would deign to overlook such trivia as a regularly scheduled game. It figures not well at all, for this summer's $\AA$ league. Actually, they did show up 45 minutes late, but too late to stop the forfeit. Magnanimously, MATH-SOCCER'S captain (who wishes to remain anonymous ???) offered to engage this derelict conglomeration of athletes in an exhibition challenge match. And what a match it was! Up and down the length of the field the play was pressed, now by your champions then by those others. MATHSOCCER'S full-backs were superb. Veritable mountains of flesh kept the oncoming golden hordes at bay. Yet even on those rare occasions that they did manage to break through, MATH-SOCCER'S untried and rookie goalie came up with the clutch saves. Spurred on by these miraculous saves a victorious front 5 finally came out of their shell to break the deadlock. Hard running, precise passing and lots of guts netted that first one. With the change at half-time, wind was now against our team. The GOLDEN GUYS taking advantage of crossed signals at mid-field plowed one in. But MATHSOCCERS despaired not. Despite the wind gusting up to $84 \mathrm{~km} / \mathrm{hour}$, they came on as furies out of hell. Metaphorically hacking their way through the ranks of tenacious defenders MATH-SOCCERS pressed on. Now in the dying minute of play, F.A. gets a corner kick. Strategy of the higher planes of existence came to the fore. R.G. breaks towards the side line, receives the corner kick, and lobs a beautiful hanger right in front of the net and Bert (the Whirlwind for short) nets the clincher. All hell heck broke loose. Fans running amuck onto the field, players embracing, grinners grinning, cryers crying and laughers laughing. This, MathSport fans, is our SUMMER OF 76 edition of MATH-SOCCERS, surely the team to beat in the upcoming months.

Ah yes, back to men's competitive softball! As was mentioned above, Math, the mathletic's men's softball team, won on a forfeit. Eager to lean those devastating clubs of destruction into the singing wind, Math challenged an unsuspecting out-of-town city team to duel on the field of honour. Hacksaw comes up with a triple. Thunderbat drills one into centre field. Hammer splits the ball in half. Et cetera, et cetera, et cetera... And on through the batting order in like fashion before a once proud and now dazed opposition were able to stop the onslaught. Now Math's own The Arm goes to the mound and picks off the opponent's batters as so much nothing. The duel, nay, the slaughter was ended by the SPCH to prevent more harm to the now flattened egoes of those others. Although Math had some flagrant deficiencies in the field as well as at bat they overpowered a decidedly weaker team. It would be interesting to see a much closer matchup to see if those slight weaknesses need gentle remedies or amputation. Math could pull some upsets in the men's competition softball A league. Watch out for them.

## - BASEBALL <br> \#2

Disregarding their small numbers, Marv's Mapleleafs were ready last Wed. to take on all comers. Of the many tens who signed up for the math slow-pitch team (co-ed rec division) only five actually showed up. After quick negotiations with the teams who played before us, we had two new recruits. After more fast-talking we managed to increase our numbers to the necessary ten by convincing the Histrionics manager that they had come out to play baseball and that they had better lend us a couple or we would force them to win by default. After a few quick innings, we found that we were behind by a number of runs, even though we were ahead in errors. Well, this had to stop. A hurried conference was held between Marv and the H's manager to find out what the rules were to the game (Marv was under the impression that we were playing by volleyball rules (co-ed rec natch)). The game suddenly took a different turn. Marv took up a position on the front-line, smashed a few out into right field and even picked up a few grounders and tossed them to our fine recruit on first base (Gary, I think). Well frantic fans, after a couple of no-runsscored innings by the other team, Marv's

M's quickly took up the slack and doubled their own score. We were now ahead by ten runs. It's the bottom of the ninth and the $\mathrm{H}^{\prime} \mathrm{s}$ are up to bat, all we need is one to win the game. Fortunately for us, we got their second player out. At which point Marv's Mapleleafs left the field amidst cheering and mumbling and went to our respective classes only an hour and a half late. Thanks must go to two special people on the team (not Marv since he didn't really do anything 'cept stand around and sweat): That is our fabulous short-stop Dave Cloutier and fantastic catcher Gail Gilford (I think that's who gave me money anyway). More on Gail in the report on the next game (Wed., June 2 on the village green at 6:15). Anybody is welcome.

## FED REPORT

In April the Federation discussed salary revisions, the tricky issue of Chevron policy and approved a new proxies policy. Since that time, with the budget passed and 5 new temporary employees hired (including former Mathsoc president Gary Dryden) activity has cooled off. Action is beginning to warm up again. A meeting is being held May 29 and is expected to last 5 hours. The Federation is trying to fight tuition hikes. Recently the Ontario government more than doubled tuition for foreign students. Some of you may like this, but it is a move which could lead to a general tuition increase. I will expand on this in a future article.

People should have fun this summer and do well in their courses, however there is much other work which should be done. The chevron needs new people to write for it. Only by trying to become a staff member can people effectively fight the present trends influencing that paper. In early June an election will be held to select a co-op Federation rep. Usually these elections are acclaimed.

There was no person elected or acclaimed last summer and the summer before the person acclaimed never came to a meeting (in fact at times I doubted his existence). Hopefully this will not happen this year. Any co-op student registered this term is eligible to run. The seat is held from June 1976 to June 1977. When reps are off term they can get a proxy if they can't attend the meetings. There is a real shortage of involved people this term; please rectify this.

JJ Long

## FROM

## MAD DOG

 DILLON

Since last mathNEWS we have had 2 meetings, an organizational meeting on the 13 th and an election meeting. The new club officers elected on the 20th are:

> President - Mike Dillon Treasurer - Bill Flowers
> Secretary - Dennis Mullin

The first meeting on the 13th was held in the math lounge and was mainly to inform people about what we have been doing and what we plan for this term. We also decided to try and hold our next meetings in M\&C 5158, the Math Colloquium Room. So, on the 20th that's where we found ourselves. It is a much nicer room than even the ones in the CC so we will be trying to make it our regular meeting place. At this meeting we elected the new officers, had a budget report, discussed our advertising (or lack thereof) and then discussed what movie to bring in as our first of the spring term. We finally settled on "War of the Worlds" as our first choice and "Clock work Orange" as our second. We also set a date for the film, June 7, so with luck we will be bringing you one of the aforementioned movies in a couple of weeks. Watch for posters. A tentative date was also set for the next issue of Starsongs, and we arranged for our cover drawing. If you have written any SF short stories or book or movie reviews or if you have anything to write an article about, please bring it to one of our meetings (every Thurs. at 7:30 in M\&C 5158 unless otherwise posted) and we will probably find room for it in the fanzine. After the meeting was over we split up with some people talking about SF, etc... and me and 6 others in a game of RISK.

This week we will have a couple of games to play after the business part of the meeting, STARFORCE \& $S O R C E R E R$, courtesy of Bob Thwaites. We will also be doing some of the preliminary layout for Starsongs. I will have a report on some of the SF events going on in this area in the near future such as LAFF \& STAR TREK 76. For more information on these come to the meeting Thursday or watch out for posters. We will also be signing up new members at the meeting. Remember, members get a sizeable discount on the Movies we show plus a discount on the fanzine. As well, members have a vote in what movies we show.

Don't forget the meeting Thursday at 7:30 in M\&C 5158. Everyone is welcome at all meetings, whether they are student, staff, faculty, or from off-campus.


The subscription manager just told me that this term he has 51 subscribers with another one about to sign up. The subscriptions are computerized. This doesn't mean that mailing labels are generated by a cold heartless efficient machine. On the contrary, names and addresses are typed out by a kindly old 2741 that usually gets them right if it's not too cantankerous. The labels are then stuck on the envelopes, usually right side up, and the mathNEWSs are placed in them. They are stamped and sealed and dropped in the nearest mail box. Each subscriber has a code number, all of which is meaningful (unlike first term where only two digits meant anything and the rest of the number was the result of a random number generator).

Following up from last fortnight's paragraph about the Americans' habit of putting cream rather than milk in tea, someone suggested that as a bicentennial project, they take a few trucks of milk down to the Boston harbour and throw the milk in. Of course, we'd be hearing cries from the old country (Britain) "No, no!, you're supposed to put the milk in before the tea!"


One favourite pastime of Honeywell hacks and related beings is that of writing programs to play Towers of Hanoi. Towers of Hanoi is a puzzle in which there are three vertical needles which act as supports for stacks of disks. At the outset, all disks reside on one needle. The disks are all different sizes, and are placed on the needle such that no disk sits on one that is smaller than itself. The challenge to the player is to transfer all the disks from one needle to another. He may only move one disk at a time, and may never place a disk on a needle so that it will sit on a smaller disk. Although the original problem specified 64 disks, modern versions of the task are performed with usually no more than 8 or 10 disks.

Writing a recursive program to print out the moves necessary to transfer the column of disks is quite easy in most normal recursive languages (it's about 5 lines of Algol). On the Honeywell, the challenge is to write programs to solve this problem in as many different languages as possible. Programs exist in all of the standard languages, but a few of the more exotic ones include the following.

A true GMAP (assembly language) program - i.e., there is a macro written in the assembler, which when passed a number, expands into a deck of comment cards containing the moves. (Note how this is different from a machine language version (which also exists).)

A ROFF program - Because ROFF is a text formatting program for generating pretty looking reports, writing the original program was a bit of a challenge, but once written, it took advantage of the fact that it was in ROFF to get the moves printed out in an impressive format.

In FORTRAN, it's a little more difficult because FORTRAN is not recursive. There are two programs, one that simulates recursion and another that goes through a few contortions to compute the $n$th move directly, given $n$.

A couple of languages available on the Honeywell are unknown enough that the only programs written in them are Towers of Hanoi programs.

Last week was Convocation, if you didn't notice. At first it seemed Security was going to have a field day with all the illegally parked cars of graduands and parents until, it is rumoured, Burt Mathews slipped over to security in the dark of the night with a pair of wire cutters and personally snipped Security's direct line to Active Towing.

After seeing a headline in a paper that stated: " 1500 will get degrees at UW", one student commented "It costs that little, eh?".


## ADS

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 third 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. MC 3038. or send them in the mait subsystem on TSS to userid mathNEWS.

WANTED: Recorder players for a very small extremely amateur group. No experience necessarywill teach!!!! Phone H at

FOUND: A beige macrame choker outside the north-east entrance of the Math Building. Phone 885-0437 on Monday, Tuesday or Wednesday at $5: 30 \mathrm{pm}$.

WATSFIC (The University of Waterloo Science Fiction Club) will be holding a fun-filled meeting on Thursday May 27th in MC5158 starting at 7:30pm. After the meeting we will be trying to force a few stars.


## Ludwig

## von Zopfault

Not much to enlighten you people with this time, as assignments are piling up again, so this column will be briefer than normal - a result I am sure that will be greeted favourably.

First, a retraction of a long-standing error in mathNEWS (specifically, the Nov. 23, 1973 issue): We were in error in referring to Prof. Graham as "Dr. Graham" in the "Prof of the Week" column of that issue.

WATSFIC is paying four times as much to get Spider Robinson (who apparently is none too well known around here) to their convention here as did the people who got him to come to this area in the first place for their convention.

Exil Q. Trob has been requested to stop quoting from the one and only letter he ever received as a mathNEWS staffer.

PASCAL is now available on the sixth-floor UNIX system. At least, for the time being. Rumour has it that the PLL (Programming Languages Lab) may be restarted in the near future, so the UNIX system could vanish.

The CSC actually held a meeting last week (free plug).

I have a complaint to make about my article of last week. (See how desperate things are when I have to refer to previous columns?) The article was not printed in its entirety. Not that I'm saying that it was censored, you understand, but I am used to having an article written and submitted, with it either getting flung back in my face or printed verbatim - not having an arbitrary chunk excised from the middle of it. Needless to say, there was justification for the powers-that-be to take this step - the column needed a bit of shortening to fit the page, and the topic in that section was casually referred to elsewhere. But it still irks one to see this happen - or perhaps they are trying to tell me something...

TO ARPEPPER:
The subset you did not recognize was the set with the lumpy sweaters. TO MY POLYLEM MA-AFFLICTED GHOSTWRITER:
I am honoured to call you friend and ally. I don't care what
anybody says.
the trob sounds off


## computer science club

The CSC held its first meeting of the term last Tuesday, and had a turnout of approximately fifteen people and five hacks. The new executive was decided as being:

President - Russell Crook

Vice-President - Peter Raynham
Secretary - Micheal Dillon
Treasurer - Slavko Stemberger.
Breaking with tradition, it was decided that the CSC would at least give the appearance of being a viable entity. The executive, in their infinite wisdom, had a meeting last Thursday and decided to subscribe to a half-dozen of the more usable computer magazines. Also, plans to hold
a trip to the Ärtificial Intelligence lab at Western and/or to the CDC mainframe plant in Mississauga were discussed, although it is not known if a tour there is possible. Guest speakers were suggested and discussed, with Dennis Ritchie coming out as the favourite. Unfortunately, no-one was quite sure what they wanted him to talk about, whether he was available, or how much it would cost to get him here. However, it seems probable that this will be settled at the next meeting, scheduled for next Tuesday (site as yet unknown). See you there.

## COMPUTING CENTRE COURSES

, of course
The Computing Centre is offering to students, staff and faculty, a programme of non-fee, non-credit courses during the Spring term. If you wish to register for any of the following courses, please send your name, departmental address, building code and a list of the courses you would like to attend, to:

> Dianne Hart
> User Services
> Computing Centre
> MC 2008.

A memo stating room numbers for the courses will be returned to you via interoffice mail. Enrolment may be limited and classes may be cancelled if response is insufficient.
(1) An introduction to FAMULUS. It is language useful to anyone doing a lot a referencing. No prerequiste required. Will be held June 7 between $3: 30$ and $4: 30 \mathrm{pm}$ with Carol Vogt as instructor.
(2) How to use the APL library of application programs. Assumes an elementary knowledge of APL. Lectures will be given on June 7th and 9th at 10:30 to 11:30am. Instructor will be Dave Burkett.
(3) Introduction to JCL (Job Control Language). Upon completion of this course you should be able to understand the functions of JCL cards and be able to use them in submitting jobs. Lectures will be held on June 8, 9,10 at $3: 30$ to $4: 30 \mathrm{pm}$. Doug Payne will instruct.

In response to Mike Ura's challenge (see FEEDBACK) mathNEWS distributed a short questionnaire. It was available to anyone who used the lounge area on the 3rd floor of the Math building. The survey was conducted on May 18th, 19th and 20th.

The proposed electronic detection system for our libraries was explained and the following responses were received.

Do you think this new system is an invasion of privacy?
Yes - 4; No - 103 ; Other - 1
Which system do you prefer?
The present one of sêarching - 3
The proposed new one - 97
None at all - 3
Other - 3
No comment - 2
Do you use the library often? Affirmative - 69 ; Negative - 37 ; No comment - 2

Fourteen persons made explicit comments to the effect that searching people at the door is more of an affront to their dignity than would be the electronic system. My favourite comments to this effect: I consider the question ridiculous. Searching your knapsack etc is an invasion of privacy. Stealing books is illegal. Crucify the bastards who ruin it for the rest of us. New system is superior to old one by far. I think Mathsoc is doing a great job except for question \#l above. John Buevello. Dear John: we at mathNEWS and mathsoc also felt that the question was ridiculous but questionnaires are supposed to be unbiased, hence the wording. As you can see though, there is overwelming support for the new private system.

Other library comments: "however, I would certainly miss the cheerful and ever-pleasant prefects if they were superceded" [Five responses made a similar comment but no fear, university policy is not to fire - but to re-assign.] "I thought the Risto article was excellent and I had noticed the flaws in the Chevron before the mathNEWS article had come out. I was especially $p^{* * *}$ ed off at the ***hole who felt he had a right to rip off a book because it cost 835 and the way the chevron supported him."

On other topics we received a wide variety of feedback: the need for more pinball machines in the Math building was noted [is there something we don't know?]; school in the summer stinks [I disagree!!; MFCF was questioned as to why first-year mathies no longer receive accounts [it was a two year experiment], and why non-white paper is being used in the printer [Central Stores found old supplies]; math 474b is too heavy [rib's course - it's interesting ]; "nice to see Math lounge clock running" [you're quite welcome - physical resources]; "I don't like Convolution" [who does, but that's an exhausted topic]; "More Parties!!" [John Denham, social director, has been informed]; "Fix the Math lounge tables" [passed on to the appropriate authority]; more $t$-shirt designs wanted [see math Council meeting report]; mathNEWS should increase circulation to bump out the chevron [a man after my own heart]; "impressed with the improvement in the mathNEWS" [thanx - hugh] mathNEWS is a waste of our \$ [how did this get in?]; the Federation shouldn't throw away money on lost causes - i.e. free education.

If your favourite comment didn't make this week's issue, try try again. We do have a mailbox in mathsoc (MC3038) and opposite third floor lounges.
hi. good morning to ya. this being the infamous mathNEWS, those crazy people who stay partially awake all tuesday night so they can sleep through classes on wednesday and have a legit reason to fail. Anyway we form the only all volunteer staff of any campus naper, and naturally we believe we're the best because of that fact. Math Society puts up the cash for us to publish (via granhic services) - thanx. Last time we had 600 conies made but ran out rather quickly; shall we try seven? This week lots of warm bodies came out to sneed up the process, hence it's only $3: 45$ and I can go home as soon as I finish here..... (dots take up a lot of space and require almost no thought to put down!!) Anvway, back to the nonsence at hand $-\mathrm{m}-$ this week we were/are: Dennis Mullin who can always be depended on; Steve Risto the almost celebrity; Randall S. McDougall our artist; Randy Morrison who tyned \& typed \& tyned; Michael Patrick Dillon supplier of Watsfic \& more typing; Hexad (what's a hexad ?? F $¢$ ) ; Ludwig von Zopfault \& Russell Crook always useful; Bun (the cartoon on front page depicts Bun on the mathsoc); Tom Keith who tyned once asain; as did waflowers \& Jody Trivers; Dave Gillett signed in at $2: 29$ and asked if we needed another article-nut. In news that never made it to the big time: : the new telephone system on campus requires the Federation to nay all the Society's phone charges $=$ $\$ 540$ for this month. Hence a plan is underfoot for the feds to chargeback the cost. (remember you heard it here first). I remain as huph *editor*

