The Way I See It :

THE SUB CRISIS

These past weeks the submarine crisis has been generating a number of emotion-packed articles and letters in **the chevron.**

Mr. Mudie, director of Food Services, seems to have committed himself to removing the privately-owned Mr. Sandwich as a campus food supplier.

Mr. Sandwich currently supplies submarines & kaisers to the MathSoc & EngSoc coffee & donut stands, and has been for well over a year. During the past school year it also supplied ArtSoc and PsychSoc.

Past suppliers of the Math stand have included Kitchener Dairies (which currently supplies the Grad Club) and Family Mini Mart.

Three years ago, before Mr. Sandwich appeared, Food Services was offered Math's business but it was declined. Last summer Mr. Mudie began to express an interest in supplying the sandwich end of the business. He admitted he had no capabilities for supplying the coffee or donuts that we handled.

Fall 1975 Mr. Mudie demonstrated his *alternatives* to our subs and kaisers to a meeting of the Societies. They decided not to switch suppliers. Several reasons were evident:

1) we had no complaint with Mr. Sandwich.
2) the quality of Food Services Food is notorious and would probably reduce business.
3) switching to Food Services may put Mr. Sandwich out of business, hence all impetus to maintain quality, price and service would disappear.
4) relations with Mr. Sandwich were friendly, why hurt a friend?
5) the alternatives (described as overgrown hotdog and hamburger buns) were not liked.

Following this meeting the Feds informed the Societies that they (the feds) were told that they would get a better deal in their negotiations with the University re the South Campus Hall if the Societies gave in.

Discussion with Food Services continued into the winter, when it was agreed that Mr. Mudie could begin supplying ArtSoc on a trial basis. He never executed the trial, ostensibly because the volume was not high enough.

A lull until spring when CUPE president Mr. Liban was pressed into the game. He has been given the idea that doing business with Mr. Sandwich was throwing hordes of his members out of work. While it is true that we could be supplying jobs, the Societies do not see that as their purpose. Societies are meant to "promote and co-ordinate athletic, cultural, social and academic activities" — and coffee & donut stands are meant to provide good food at cheap prices in convenient locations at convenient hours.

As to the claim that more Union people would be working I suggest that CUPE worry instead and wonder about their present full-time staff who are being ignored in favour of non-union cheaper part-timers.

The **chevron** has been having a field day with three articles by dionyx mcmichael, all of which have been noticably pushing the Union viewpoint, trying to make the Societies look like contradictory

continued on page 2...

Thursday, July 8, 1976
Issue 11.3

the tardy once-in-a-while

math NEWS

BUNSOC

.....ALL HAIL

Since you last heard from me, 3 weeks have gone by and two MathSoc meetings. You Mathies really don't know what you're missing (then again, maybe you do). On the other hand, maybe you just don't know where and when they are held (heavens forbid). So for all those uninformed, they are held every other Tuesday in M&C 5158 at 4:30 p.m. (unless otherwise posted). Next one on July 20th. Come on out and air your views. Or your socks, we don't care.

*Acclamations are coming! Nominations for three 2A reps and two 3A reps opened at 9:00 a.m. on July 5th, closing at 9:00a.m. July 12th. Acclamations will then be held on July 19th. Keep those nominations coming!

*Ghost is back again! Those of you who attended the last pubs on June 17 and 29 know how great they were, so spread the word. Ghost will make an appearance at the Arts-Science pub to be held on July 15th in M&C 5136. Come and enjoy (or vice versa).

*Starting on July 13th, and continuing every week there after, there will be Bridge Evenings upstairs at the Grad Club. Grab your partners and have a good time.

Also, starting July 14th there will be Cribbage and Euchre evenings. Stay tuned for more details.

*Gary Prudence, MathSoc president, gave a reckoning of the Committee of Presidents meeting held on Thursday June 17th. Various topics were discussed, the major ones (concerning MathSoc) being C&D, where Shane Roberts stated he was behind the Societies, and the "agreement" with the Feds and Administration to hold a couple of Pubs at South Campus Hall before the end of the year.

*It may have come to your attention that the examination period has been extended from Friday, August 6th to Wednesday, August 11th. Checking the exam timetable, you may notice that no exams have been scheduled for the Monday, Tuesday and Wednesday of the extended period. Hats off to Hexad.

*T-shirts will be arriving next week sometime (knock on wood). Frosh will pay the nominal fee of $2.00 while others will pay the regular $2.25.

*Just to remaind you, Math-Eng, along with the Feds are throwing a beach party Sunday, July 11th at Columbia Pond. From 12-3pm there will be races, Baseball tournaments and other activities arranged. From 3-6pm there will be music from two groups, The Original Sloth Band and the Good Brothers. Grub will be available, 12-5pm, in the form of hamburgers, hot dawgs and soft drinks. NOTE: Park your vehicles **ONLY** in Village I and II parking lots and not on Columbia St., since the men in blue will be waiting for you!

*Math Day (huh?). Goin' down on Saturday, July 17th. Events planned are Horseback riding, 2-4pm, Go-carting at Erbsville, 5-7pm, buffet lounge M&C 5136, and a pub afterwards featuring GHOST!!!

That's all for this issue and hopefully we'll be churning out this rag more regularly for you folks, but it is kinda hard when there is no news, no typists and no photo tripesetter to help. Sorry for the delay.

Keep smilin'
BUN

The Sub War

...continued from page 1

fools and scab employers. The student sources quoted in her articles have complained of having their comments twisted by editting them out of context.

This past year we have seen the replacement of the Union caretakers in University buildings by a non-union contracted firm, and the subsequent reinstatement of the Union people after the contracted firm did not maintain to the satisfaction of the University. May it be pointed out that the firing of **dozens** of Union people last fall did not rise the ire of the crusading **chevron,** the special interest groups, or the Union. Indeed the only complaints that reached my ears concerned the messy buildings.

Is there some personal reason that Mr. Sandwich is being hounded? There are countless examples of non-union labour and products being utilized and consumed on campus, by every group. Indeed it is a well known secret that any group controlling money just as a matter of course investigates the methods and possibilities of doing without the benefit of campus Union labour, because of the cost.

This is getting to be a very dirty issue and is not making anyone happy. Don't the Societies have the right to spend the money collected for them in the best manner they see fit — as can any other organization on campus?

To the enemy: yes I am a friend of the owners of Mr. Sandwich — but I **challenge** *you to demonstrate how this fact colours my opinions. I base my opinions on facts* — **NOT on personal love/hate!**

(Personal to the AIA: does this mean that I can be the next person on my block to be denounced??)

ron j hipfner

Listen to AKFM

The Student Advisory Council to the Department of Co-ordination (SAC) held a meeting on June 23 in NH 3001. This was the first in a number of meetings to be held by the Council.

For those of you who don't know what we are, here's a small idea of its purpose. The Council advises the Department of Co-ordination and Placement on matters of importance brought to the Council as well as comment on topics of interest arising from the Department's Co-ordination critique, which is the first topic to be discussed. Other topics such as the English Co-op programme will be put before the Council. Minutes for these meetings will be available in the MathSoc office via the soc president or from council members Andy Mueller, Ron Hipfner or Dave Knox.

If you have any request or topics of interest to co-op students, please come forth to one of your council members.

That's all until the next meeting,
Andy Mueller
1b class rep

WATSFIC

Here I am again with another one in a continuing series of **mathNEWS** articles on the happenings in **WATSFIC.** At the June 17th meeting we got into a lively discussion of the merits of various substitutes for planetary systems, i.e. Dyson spheres, Ringworlds, disks like a phonograph record with the sun in the centre hole, plus a few wilder variations. At the end the consensus seemed to be that Ringworlds, ala Larry Niven, were the best substitute. After the meeting, most of us adjourned to the Mathsoc pub, conveniently located down the hall, to quaff a few. {*Mad Dog neglected to mention the fact that during the meeting a vote was taken to overthrow the president. Everyone was in favour. The secretary supplied the motive force necessary to overturn the president's chair with Mad Dog in it. Mad Dog admitted afterwards that he really wasn't listening to the motion*}.

And now on to the subject of **movies.** First of all, **WATSFIC** will be showing *WESTWORLD* this Monday 12th of July in M&C2066 at 8:00 pm and 10:00 pm. The time change is in response to those who have a 7 - 10 class that caused them to miss both showings last time. Admission will be $0.65 for members and $1.25 for others. If you want to become a member you can join at the door. Secondly, for those of you who will still be in the general area of Waterloo in September, **WATSFIC** is sponsoring an **all-nighter of SF movies** on Sept. 17 from 8 pm 'til 8 am followed by a pancake breakfast all free of charge. So if you can make it to Waterloo (the 17th is a Friday) here's a chance to see some good SF flicks.

This past Saturday found me on the campus of Erindale College in Mississauga for **Trawnacon,** the first SF con that I had ever gone to. First of all let me say the con was a flop. It was so poorly organized it was unbelievable (and these people ran a con last year???). But not all was lost. There were a lot of good SF movies (worth the price of admission alone) and I got a chance to meet my first SF author, namely **Spider Robinson** who writes for **ANALOG & Galaxy** and who will be guest of honour at our con in October called, what else, **OKTOBERKON.** Saturday night the con adjourned to a party in the Erindale residence where we discussed SF, drank beer, sang songs (Spider can do more than just write!), and put together a one-shot (an SF fanzine written and published via mimeo all in one shot.) I can hardly wait for **Star Trek 76** in T.O. July 23 - 25.

Now on to other things. *STARSONGS 2* is currently in the production stages and will be out in a week or so. The next **WATSFIC** meeting will be on July 8th at 7:30pm in MC5097. We will be picking the movies to show for the rest of the month, as well as making plans for an SF book *buy-sell-trade* sale. The meeting after that will be back in the regular room of MC5058.

Mad Dog

mathNEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but if requested, a pen name will be used. Put your **Feedback** articles in our *mailbox* on the third floor outside the lounge, or mail it to us on TSS to 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.

Dear **mathNEWS:**

I am the **WATSFIC** treasurer and I would like a chance to clear up the source of the quote attributed to me in your last issue in the Gridword column before my girlfriend (a student nurse, proficient with the scalpal) commits terrible things on my personage!

The gridword editor and I were sitting in the Village cafateria on a hot day, trying to ignore the food and watch the lovelies in their shorts and halters. I happened to spy a sight more wonderful than any of the others and completely ignored my meal (quite a feat). The gridword editor noticed my expression and chortled to himself (he has a mean chortle).

I saw this and, quoting a fellow I worked with in the winter term, I said *"I'm not in love, just in lust!"* Note that this is just a quote from someone else! I hope you print this in your next issue (and I hope my girlfriend understands). I also hope that you are more careful what you publish in the future in the gridword!

I remain,
WAFLOWERS

Gridword editor comment: Be sure and read this issue's grid column. (End of plug).

Dear **mathNEWS:**

In one of the more recent **mathNEWS** mastheads, which I believe is the last portion of a seagoing vessel to be observed before sinking, one antonio h. e. vaselino was trobbed with the title of "p-suedonym". I realize that the name appears a little unusual upon first impact with the retinal systems of students already strained with the weighty concerns of the world and the future of pink ties and orange bombshelters, yet Antonio H. E Vaselino does indeed exist. If some person has used my name in order to implicate me with some nefarious Anti-Martian Alliance activity, or to lend support to the firings of Forest Marshes, then may that souls name be non-renewable pending the new fiscal year. I am sure that this has been a simple Watsonian misunderstanding. Thank you.

Antonio Heironymous E. Vaselino

Comment: Ian, you are absolutely right.

CSC on a TRIP

The Computer Science Club has held two meetings after the organizational meeting. The first was fairly well attended, the second attracted 5 people (more or less — hacks not included).

The CSC has gotten subscriptions for a number of popular magazines that deal with computing as a hobby, which should make for a refreshing break from the highly technical (and usually uninteresting) offerings from the ACM. When copies of these magazines show up, CSCers will be welcome to come to the office, sit down, have a cup of csc coffee (a kind description for that brown stuff) and read the latest info on minicomputers. This is not to say that they are not welcome *NOW*, but they somehow seem to avoid the office (M&C 3037) as if it possessed COBOL hacks and disco music.

In passing, it might be noted a microprocessor club has formed. Originally to be a sub-organization of the IEEE club over in electrical engineering, plans are afoot to alter its status so that it is an independent club and can work in coordination with both engineering's IEEE (the hardware angle) and math's CSC (the software angle). And, knowing the CSC as I do, the IEEE group is optimistic in the extreme if they think much will get done...the CSC moves slower than WIDJET on a bad day in such matters.

The CSC featured a trip to the Control Data Corporation plant in Mississauga two weeks ago. Twenty people participated in the trip. We all arrived there at 9:30 the morning of the tour, and upon showing up, found out that the people knew nothing of our coming. Naturally, the CSC person who organized the venture with CDC was unable to participate, so he couldn't tell us with whom he had made arrangements (smartest move I've pulled in a long time — said organizer). Eventually, they tried to get in touch with the director of things like publicity, but he also happened to be somewhere far away. Finally it was decided that our contact had talked to this man who had failed to tell anyone else and we got both apologies and a tour. After the tour, I found out that in fact we had not talked to this person but someone else, so now CDC will never know that we actually had planned this and didn't just show up.

We were given a tour of the plant and shown the place where their Cyber computers are manufactured as well as the terminal production areas (CDC makes Vu-Coms for Bell Canada). Although a hack and pseudo-hack wandered away from the main group before this point, they were collared and returned to the care of the CSC vice-president, complete with "danger — visitor" buttons, and they caused few problems. We were also shown a refurbishing area where used hardware such as peripheral equipment is reconditioned to meet certain standards. They have a research facility to carry out testing of new design ideas for the Cyber machines. There is no real research in the form of looking for new ideas, however there is design work done, i.e., implementing known ideas for their use. The plant is mainly hardware, a little software production goes on, but not too much. We also had a glance at the Cybers used to carry out the processing needs of the plant.

Afterwards, we had interesting discussions with a few CDC persons about various things dealing with computing in general and CDC. All in all, it was an enlightening and worthwile trip. Suggestions for next term's trip should be submitted as soon as possible, since next term's exec is likely to come closer to the CSC norm and not do anything if they aren't prodded frequently.

The CSC also was helping with sending Russell Crook, (MathSoc and the Faculty of Math also helped) one of the two resident Tree-Frog (the chess program) experts out to Edmonton to play the program against others in the Third Canadian Computer Chess Championship. Unfortunately, the airline pilot's strike cancelled this. This meant that the program had to be run by people not as familiar with it. The sad result was that we placed eighth in the standings, losing to programs we had always beaten before.

Bringing Dennis Ritchie to speak here has been postponed (due to reallocation of funds) and probably will be suspended until the fall. This will also allow a larger audience to hear this man (assuming the previously mentioned problems of availability, cost, and topic for discussion can be resolved).

No next meeting has been set, but keep watching the bulletin boards. We'll probably sneak one by you soon.

Teaching Option News

The job situation is looking much better now than it did at the beginning of term. Eric Whalen reports that there are 16 jobs for 17 people. There is still a remote chance that a few jobs might come in but in any case this is a much healthier situation than was originally predicted. We are also reminded to send our Boards a thank-you letter for having us back to another term of ?? learning the hardships of teaching. A little PR never hurts.

All teaching students are advised to check the bulletin board outside MC5013 for further information on seminar dates that are to be scheduled this term.

Sports

It was another tough week for the teachers' coed slowpitch team. We lost another one by a single run when the last batter on the opposing team dribbled the ball down the first base line for a home run. But the game was not a total disaster; Barb Bowen has proved to be the greatest second baseman (basewoman) that the league has ever seen. No one can pivot like Barb (!) when she turns over the double play. (For our baseball fanatics that means getting two guys out on the same play.) And absolutely no one stays on second base as long as Barb when some guy is sliding into her. Anyway, come out and support our team every second Wednesday at 16:45. Check the bulletin board for the location.

In basketball MTO lost their second in a row against the Basketballers. The game was close all the way but with thirty seconds left the Basketballers scored the insurance points to win the game by four. Mike Watton held MTO together after the big man Jim Senn got four quick fouls early in the game. Gene Cassidy gave another fine performance highlighted by a neat shooting display.

The second game (a week later) proved to be even closer and much more exciting. MTO pulled out a two point win when Mike Watton hit the winning basket with 19 seconds left. The slackers proved to be a tough team because they had only five players compared to MTO's twelve. Mike and Jim (high scorer) did a fine job controlling the boards. MTO's record is now 2 and 2.

MTO won an impressive game on Wednesday beating Engineering Elite by 30 points. The win was very satisfying for MTO because their play has been very shoddy of late. Everything came together and they now have a 3 + 2 record. Jim Senn and Gene Cassidy played great games and Dave Brehn played solidly under the boards all night long. MTO gets ready for the big game next week against St. Pauls.

The teachers' coed slow-pitch won their first game of the season, spoiling their defeated streak of 2 losses. Team captain Barb Bowen summed it up well when she said "we just can't do wrong today, everything is going our way". Barb was right, the other team defaulted.

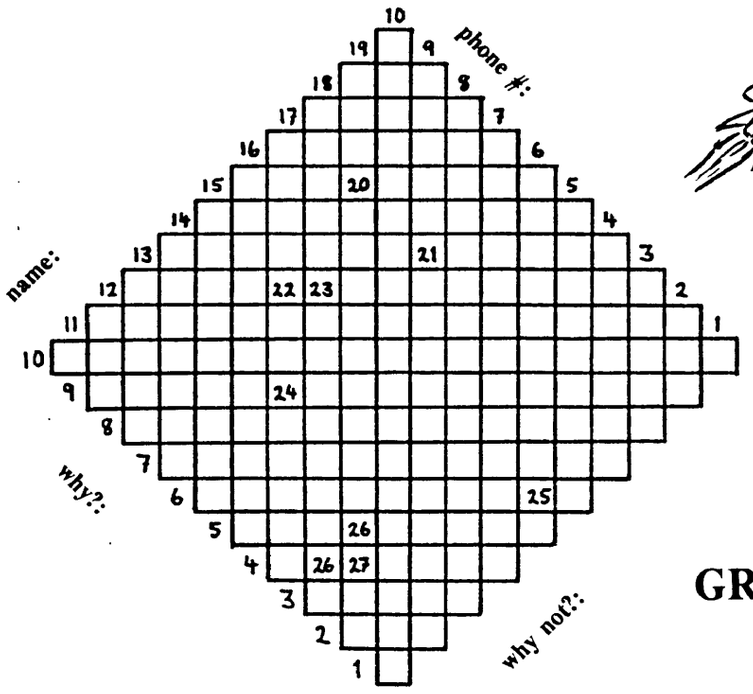
Notes.....

-It was a nice time we had at the CC Pub (it will always be CC with me) when prof Ritchie and his special guest Pat Canyon joined us in our Wednesday night get together. We hope to do it again sometime soon.

-It seems that our budding superstar (of the MTO) Rob Mcleish is out for at least one month with a fracture in his foot. He acquired this while playing football. He tripped over a lawn sprinkler while making a pass at some unknown female bystander. Sorry Rob; get well soon.

-The Junior Math Contest kids were at U.of W. for a week long seminar that is held every year at this time. Representatives from each province are invited to come and attend special lectures (this year on probability) and introduce themselves to our computers. Lots of fun, isn't it, kiddies?..

-Final note. If you ordered a T-shirt please give your money (3 bills) to Cathy Henderson or Barb Bowen a.s.a.p.



GRIDWORD

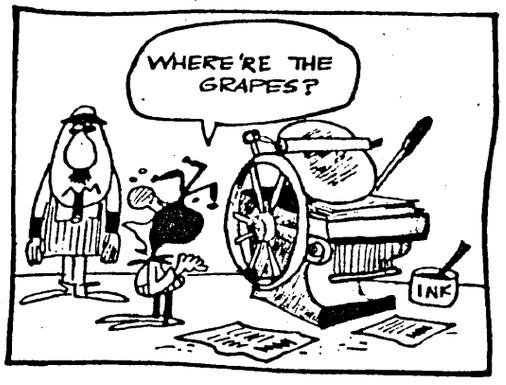
To all those readers who cursed me for last issue's grid-page: *Please* **STOP!** I've had the flu and a headcold ever since then.

Out of our 2 correct entries (as a matter of fact they were the only entries we had) the winner picked was **Mark Brader** (a train wreck if I ever saw one). Bruce Jolliffe was the submitter who went down to defeat before the roll of the die.

This issue's gridword was created by Ray Butterworth. We think it is a great grid (especially since he typed it up for us). Get your entries into the greedy hands of the grideditor (that's me) by July 17th (later if **mathNEWS** has production problems).

We are still on the lookout for gridwords to use on this page. Got any lurking in your mind which are worth a t-shirt? Then send them in to your local **mathNEWS.**

And now, a few more quotes: *"Let's not have any more issues of* **mathNEWS** *this term."* said by the managing editor of **mathNEWS** during yet another photon-typesetter failure. And the **WATSFIC** treasurer was heard to utter during a meeting *"Go out and shoot your girlfriend."* (Fun things to do in the summer).



LAST ISSUE'S SOLUTION

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ORDER*ASSUMED
S*E*H*S*O*E**
COPPERS*R*N**
U*O*T*E*TITLE
L*R*O*R*****N
ASTER*TAPER*D
T***I***R***E
O*TACIT*INDIA
R*O***E*V*U*R
YETIS*N*A*M*M
**A*U*NOTABLE
**L*R*I*E*E*N
ANSWERS*STRUT
```

DOWN

1 plural case of 27 down(?)[1]
2 a single detergent bubble[3]
3 remove grease[5]
4 Fred Cin, D.D[3,1,3]
5 dirty the cosmetic saleslady[5,4]
6 small swine garland[6,3]
7 SUDU hasn't aged[4,2,2,5]
8 catch Waterloo settler[6,9]
9 plural of element 76[5]
10 Kilgore Trout novel[5,2,3,4,5]
11 =25 across[1]
12 gratuity[3]
13 clues or cheese slices, mixed up[5]
14 a small nocturnal bird[1,3,3]
15 test of analytic geometry[4,5]
16 accupational disease of scuba divers[3,3,5]
17 Hebrew life[4]
18 condems to death[5]
19 set[3]
20 teases Peter[5,4]
21 cut praise[5,6]
22 from French[2]
23 bridle part[7]
24 resort[5]
25 =1 down[1]
26 plural of 22 across[1]
27 exists[2]

ACROSS

1 a place to go(?)[1]
2 cunning[3]
3 a persistant attack[5]
4 log base[1]
5 last part of 3 across[3]
6 collection for new soup scoop[5,4]
7 dally frequently king of beasts[3,3,3,4]
8 Heinlein novel[1,4,4,2,4]
9 itchy scales[5]
10 a decade short of Orwell[8,7,4]
11 Asimov novel[3,4,10]
12 silly annoying person[4]
13 craftsman[7]
14 crew lumber exists[4,5,2]
15 questionable pronoun[3]
16 transposed rows[7]
17 compact[5]
18 Earthy prefix[3]
19 victory[1]
20 advice to slouchers[3,2]
21 to predict form omens[5]
22 no clue is needed[0]
23 why cry over the milk?[2,7]
24 backwards acid - phenol a[1,6,4]
25 half of an m[1]
26 more of 2 across[5]
27 heated 25 across[3,1]

Mythletics.

WHATNOT SPORTS????

Well not a screaming whole hell of a lot happened in *Mythletics* in the last two weeks, just one Slow-pitch game.

Marvin's Mapleleafs took to the field last Wednesday (actually by now, it's two weeks. Editor) and proceeded to play musical players with the *Standard Errors*. Dryden naturally was traded to the opposition, while *Marv* elected to keep *Scrooge*, even though he'd had a lousy game the week before.

The *Standard Errors* stationed *Dryden* about 200 yards out in centre field, claiming he was the only one who could throw the ball all that way [it was rumoured that they knew he was a crummy catch and wanted him out of the way of any action].

Marv's Mapleleafs proceeded to trounce the *Standard Deviates* on some key flubs by *Dryden* in centre field. *Scrooge* stated between innings, "I knew that *Dryden's* lucky fielding streak from last week couldn't last forever. So I plowed a few line drives at him, knowing with his depth perception, if the ball took a bounce before it got to him, he'd never touch it."

At the top of the 5th, a few more *Standard Deviates* showed up, so *Marv*, out of the goodness of his heart, but mostly at the insistence of the S.D.'s, decided to give the *Deviants* a chance by taking *Dryden* back.

As you read last issue, *Dryden* has not been having a tremendously successful season at the plate. This game was no exception. You may have noticed him hobbling around the Math building with one leg looking like it had been attacked by a Mozzarella cheese grater. Here's the dirt on (and in) that. *Dryden* is on 2nd, on a hit by *Gail*. The next feller goes up to bat and wacks a good one. Well *Dryden* is rounding third and his toe-nails lose traction [I told him not to cut those nails, now he can't climb trees, to pick bananas, for food. Editor] and he spins out and lands on good old *U of W* grass [really! it was the grass, I think if'n he hadda had his druthers, he'd've landed on the gravel]. With his last gasp, his arm reaches out and tags third. Safe at third. Well almost, *Gail* mistaking him for third base comes streaking down and steps on his hand. When she'd realized *Dryden* was also claiming to be on third, she demanded that he get up and hop towards homeplate as she had no intentions of getting put out just because *Dryden* was half dead [real friendly type broad, I don't mind admitting]. Needless to say, *Hop-a-long* had no chance to sort of slother by the catcher, who by this time was standing on home daring *Dryden* to try and hop home.

It's just lucky that the whole *Hosebag* team didn't play like *Shultzie & Groiner*, who were suffering from "mal-coordination plus" last Wednesday. It was their one-two error combination that kept *Biology* in the game. At one point the *Hosebag's* notorious coach *Libidinous Lorraine* was forced to pull *Shultzie*, to break up the one-two losing combination. [*Libidinous Lorraine* wasn't a loser this week for a change. She got $1.25 worth of action, at 2 bits a hit, figure it out.] Finally after much coercion and action (about 75 cents worth), *Schultzie* was allowed to re-enter the game, and went on to become a star. [It must have been the locker room pep-talk between the two that did it.]

In league news, the biggest trade of the season occurred this week. The *Hosebags* traded 3B Civil Engineering (to be used as aircraft stops on the *H.M.S. Bonaventure)* plus a popsicle, to the armed forces for *Nancy*, the Pop Tart (so named as she has never been known to hit anything but pop-flies to the pitcher). *Lorraine* stressed that it was a critically important trade, as *Nancy's* style coincided exactly with that of the *Hosebags*, and that *Hosebags* needed strength upfront. There were rumours that *the Nance* was disenchanted with her former owners, as she did not feel they were putting her talents to effective use, and was planning a defection, to return to *Waterloo* anyway. *LL* stated after the game, "*The Nance* pulled her weight out there tonight. I'd say she made at least 50 cents".

Hosebags in Heaven after thrilling defeat of Biology! Challenge Teaching Option at Beach Party this Sunday

Post-game activities were a little more ludicrous than usual this week. It seems that the boys wanted to watch the completion of another game between two stacked teams. *Schultzie* declared that all the boys were god-damn perverts and told them he wasn't sticking around to wait for them to get their jollies off. As he was taking off in the pick-up truck, *B.B.* threw his glove at the truck and broke the windshield. *Shultzie* wasn't too happy, "It would have to be some unemployed *S.O.B.* that wrecked my truck".

Well, I tell you folks, this is getting downright annoying. Once again the intrepid (decrepit?) *Mythletics* reporters have been foiled in their attempts to bring all the lies you care to read. That's right, another week has gone by and our sparkling wit gathers dust in the wait file. No paper again this week! (last week? next week?) Who knows when you will get to read this . Perhaps it's just as well considering how extremely little managed not to happen this week.

There are a few little items to toss your eager way though. *Systems Sucks* lived up to their hard-earned name by deciding not to face the fury of the *Hosebags* (who generally regard n-gineers as belonging to a class of life somewhere in between the orangutang and the lesser wart-hog, but with somewhat fewer manners than the latter, and considerably less class than the former) So much for one promising battle! Not being able to drive base-balls at n-gineers' heads thoroughly slutted-off young *Mr. Dryden* and caused him to vent his anger on the floors, doors, walls, ceiling, furniture, and inhabitants of the *Mathsoc* office, with the aid, of course, of the (only) *Mathsoc* baseball bat.

Soggy skies (and fields) found many members of *Marv's Maple Leafs* and the loyal opposition snug and warm in the boozum of the *C.C. Pub* (I refuse to call it the you-know-what). So, those of the two teams crazy enough to stand on a wet field during a lightning storm joined forces for a rousing game of *move-up*

Not a great deal was accomplished, but a wet time was had by all. Perhaps next time we can convince a few other fool-hardy souls to brave the elements and we can actually have a game, dazzling as the prospect may sound.

Well, so much for stern lectures. We know that you won't listen anyway. Onwards, then, to cheerier things. You will all be pleased to know that *Dryden and Scrooge* having in mind the upcoming baseball tournament have decided to foray further afield than normally would be their wont, in order to scout up some talent for their decimated teams. Off into the great piney wilderness we go on this holiest of holidays (the birthday of this great nation of ours, folks - yes, indeed!) in search of the legendary *mad batter of the north*. And a grueling search it will be too, as anyone who has ventured north of the outpost of *Huntsville* will readily tell you. Fortified with a mere case of *Mr. Molson's* and *Mr. Labatt's* best respectively, your faithful reporters, will brave the vagaries of *Mr. Davis'* paths into the wilderness and with a wary eye out for man-eating mooses, will venture into the northern wasteland, deep into country seldom seen by the white-man. A dangerous journey, indeed O fearful reader, but fear not, for though our flesh is weak our spirits are exceptionally powerful, and a trek no normal man would dare we semi-conscious pair will tackle.

There is but one thing we fear (well two really, if you count the early draining of our spirits as one — a prospect to horrible to contemplate though), and that is the legend of the terrible and foul beast which lurks amid the swamps and marshes of the interminable boreal forest. It is there we must go to find *the mad batter*, but it is there where lives the dreaded *Crunchy Frog*, a creature to be avoided no matter the cost. Stayed tuned to this column, gentle reader, and pray for our souls.

INCORRIGIBLE INDIVISIBLE

BURLOAF

I saw an article on a new computer that has been developed here, in the Gazette last week. The machine has a PDP 11/10 (a sort of souped down version of the 11/45 which supports UNIX) as its central processor with a card reader, line printer, and TV terminal as its peripherals. The whole thing is mobile. They gave it the rather unglamorous name of WATPCF, for WATerloo Portable Computing Facility, a name that makes it sound more like a pollution device for a car than a computer. The original name, WATCOW, for WATerloo Computer On Wheels, was much classier. Had they kept that name, they could have talked about how high schools were going to milk the device for all it's worth.

Speaking of quaint acronyms, have you heard of the Computing Centre's "WATerloo Computer Resource Allocation Procedure"? Even without having seen the chargeout policy before, people seem to know its name, for they often remark "WATCRAP is this?" when shown it.

Now, on a more serious note, everyone who uses WIDJET or Debug gripes about the slowness and problems with these systems. Sometimes you hear someone say that he wishes he could do his assignment on the Honeywell rather than WIDJET so that he could get his work done faster. The problem with his solution is that if everyone were given this option, then the Honeywell (or whatever system everyone would flood to) would become just as unbearable as WIDJET.

The Math Faculty is faced with the problem of supplying a computer resource that supports many users running little jobs. The jobs are small enough that no vast resources are required for any individual job, however, fast turnaround time becomes an important factor.

The Debug terminal was one of the first answers to this need. In its day, it was a reasonable solution. You got your jobs run in a batch environment, but you got results back a lot quicker than in a traditional batch shop. However, this system strained under the weight of increased user populations (and also excessive file I/O on the part of Cobol programs, I have heard).

Seeing the inadequacy of Debug, another solution to the problem of supporting many users and their small jobs was sought. Looking to a more timesharing sort of system, the answer was WIDJET. This system allowed users to talk to a PDP 11 which could edit files, but which passed them off to the IBM 360 for storage and processing. However, it turns out that WIDJET is not the solution either. In a way it makes things worse than a batch system, for on a batch system, while the machine takes forever to do what you asked it to, you can go away and do something else (like have a j00s). However, when using a time sharing system that takes the same length of time (because it sneaks your job through the same batch system) you are forced to waste time, getting bored, twiddling your thumbs in front of an idle terminal.

In summary, everyone who gripes about WIDJET has a valid complaint because WIDJET isn't that good. However, the complaint is not totally valid because while everyone realizes the inadequacy of current systems, no one comes up with a better idea. In other words, the best that's been done to date is to show good ways *not* to handle the original problem.

A few years back, U of W was offered a CDC Star computer for a real low price (relatively speaking). The Star is an interesting machine in that it is an "extra large" machine (in terms of computing power, not physical volume). For example, there is a machine instruction that transposes a matrix. The machine is incredibly fast as well. We figured the reason U of W turned it down was because all they'd want to do with it is write WIDJET for it. The problem they'd have though is that it would run so fast that there'd be nothing the Computing Centre could do to slow it down to a snail's pace.

And now for a little gem from number theory: 24 is the largest integer divisible by all natural numbers less than or equal to its square root. The proof of this fact hinges on the proof of another gem, namely that 30 is the largest integer for which all numbers less than and relatively prime to it are prime numbers.

UNIX supports many things that users like and one of these nice (no pun intended) features is the ability to run a process at a low priority so that no users notice a degredation in response, but the idle CPU time is used for this process. This allows users to run programs whose results are not urgently needed, but which require much processor time (e.g., working out e to a million places or counting the number of ominos of 23 squares). Recently UNIX upstairs had been processing some problem but then it was completed and there was time available for another problem. Right now, π is being computed to some ridiculously large number of places. They're open for ideas for things to compute in this manner, so you're free to suggest problems. On other UNIXs, problems have been set running that soaked up several months of processor time.

Mankind has been the victim of many awful things, for example the plague and floods have cause much pain and suffering. Now, a new kind of plague is upon the land. This plague is called Disco music. There used to be a time when you could expect reasonable music at MathSoc events, but now all you here is disco. All the time, songs played on AM make you want to "get up and boogie" over to the radio to shut it off. However, there is hope. The Hackers have come up with a plan to stock up on dynamite (dyno-mite?) and blow up all these places festering with ill music. (In passing, it might be noted that MIT is a top flight university in the states that only got to be that way by doing things right. This was typified by the music suppliers in a pub I attended there. They knew disco records had a place in any well-planned sound show, and wherever that place was, it certainly wasn't on any turntable.)

It is being suggested that in the same spirit as the Campus Centre Pub's non-smokers night, that every once in a while, they hold a Good Music night, one where they'd play stuff you want to hear, namely music, not disco.

Gary Dryden and J.J. Long have finally made it into their political careers. Before last week, they were just another couple of people in the crowd of nobodys that get nowhere by doing ineffective things. But now, they have been graduated by an able body to the arena of big time politicians. Yes, folks, this week in **the chevron**, they were officially denounced (i.e., existence acknowledged) by the Anti Imperialist Alliance.

A few other MathSoccers and friends, being a little envious, have plans to write letters to **the chevron** stating views on some topics so that they too can be denounced. If that fails, then they will turn up at AIA meetings and try to force the passage of resolutions that denounce themselves.

The Federation of Students, among others, are perennially filling us in on the way things are really great in the People's Republic of China. However, in all their trumpeting about the wonderfulness of life there today, they are conveniently overlooking a contradiction in their thinking. The advancement in China today is due in a big way to the fact that people there work a lot harder than what we do for a lot less than what we have. The communist Chinese general population has a lot less in the way of priviliges (for example, peasants are not allowed to move from their designated commune) and must do a lot more for the country. Now just try to find one of these China-extollers who believes in doing any more work for the state than he can possible get away with. You'll have better luck getting a camel through the eye of a needle. (You know these guys, they're the ones who in the Student Handbook tell you how to cheat the system to get unemployment insurance money when you're not eligible.)

continued on page 7...

...continued from page 6

This week, for our weekly integer, we had planned to present a very large number (infinitely large), however, it turns out that due to a technicality, it isn't an integer at all. The number in question is the smallest *measurable cardinal,* a number whose existence was just recently conclusively proved (see UNIX news for details). A measurable cardinal is the number of elements in a set that can't be *constructed.* Mathematicians can construct a set if they have a way of generating all its elements. Infinite sets such as the integers can be easily constructed (start with the empty set, define the number of elements in it to be 0. Then define the number of elements in {0} to be 1, the number of elements in {0,1} to be 2, etc). Larger sets, such as the real numbers, can also be contructed. In fact, sets of orders of magnitutde larger than any of these ones can be constructed. It had been generally thought that there was *no* set that couldn't be constructed. However, we now know that there exists a set that is so large, we can't define all it's elements.

Anyway, this is all beside the point. Being unable to use that number, we decided to settle for an good old fashioned integer. So this week, our INTEGER_OF_THE_WEEK is

78

This is an integer from back in the good old days when life was simpler, people were happier and there was no disco. 78 was the speed at which old records with a "standard" groove (today's records have "microgrooves") were played. Edison chose 78 as the RPM for his record player with no real reason except that they had to turn at some speed. $78 = 33 + 45$ (this ignores 16, but then that never was a popular record speed anyway). $78 = 6 \times 13$, the 6 represents about how many minutes of music could be put on the side of a 78 and the 13 represents how many sides you might find used in any fair size recording made on 78's.

Also, for this week's **mathNEWS**, 78 is an approximate count of the number of unsuccessful attempts made to get the photo tripesetter to do anything except sit there looking silly.

MOVIE!

Monday July 12th
WESTWORLD

in M&C 2066

at

8pm & 10pm

ADS

Introductory Seminar: Psi Mind Development Institute. The evening is completely free, come down and see two really incredible demonstrations. Free coffee & cookies. Thursday July 8, MC 3003, 7:30 pm.

WANTED: 3 females to share a 4 bedroom townhouse in Sunnydale, September to December. Partly furnished. $275/month. Helen Brydges 884-7240 or toronto 425-9367.

ROBOT WANTED: to assemble the 170 pieces of an automatic calendar watch, handle up to 40 pieces a minute, move pieces at 300 mm/sec and 180 degrees/sec with a precision of ± .01 mm. Man's 27 degrees of freedom not required. May have to work under a minicomputer. Excellent working conditions in Switzerland (see photographs p. 15). Terms negotiable according to demonstrated modularity. Send applications in confidence to Box A-10, **mathNEWS**, M&C3038.

Ciaran's Contest: Whoever is the first person to send cgo'donnell mail message #1000 will get $1.00. Send mail to cgo'donnell for details.

FOR SALE: jtgo'leary's stolen bike. CHEAP, call 885-2843.

WANTED: Supplier of dynamite, needed for proposed disco destruction. Contact the denizens of M&C 4053 or M&C 6198 for details.

FOR SALE: Beautiful white desk. Comes with useless computer and two funny looking terminals. Only $20,000.00

LOST on June 23/76: 1 blue Algebra notebook. Please return to MathSoc office. Notes are valuable.

NEEDED Warm bodies to work on microprogramming the EIS box on the 'bun and to write B software for formatting, justification, and hyphenation on the new photocomp machine. This is potential Math499 stuff. Reply rjb.

WATSFIC will be getting together for a celebration *(?!)* on July 8th in MC5097. At 7:30pm the usual activity of starting the meeting will occur. The zwitterions will be released to attack any zooids which wander in (in particular SLR). The science of zymurgy will be applied to any bright ideas generated by members and non-members. All welcome. (Dictionary in library or mathSoc office).

WANTED: $20.00 worth of blonde lebanese hash. include samples. call ciaran at 885-2843 when ready.

WANTED: Ciaran. Phone Sgt. O'Leary at 885-2843.

WANTED: 1 body to share apartment in Don Mills — Sheppard area in T.O. for fall co-op work-term. Contact Bun via MathSoc.

Attention Ottawa

An organization sponsored by MathSoc may be set up to co-ordinate pubs, parties, and other activities for co-op students working in Ottawa during the fall term. Hopefully these would be similar to those currently being held for co-op students in Toronto. Basically we would have a weekly pub, which would be held at a different location each week. If this plan is to succeed, we must have an indication of how much interest there would be in such activities. In the past week there has been favourable reaction expressed to the idea as it was mentioned in the last issue of **mathNEWS.** Now a more definite response is needed before planning can go forward. So if you are interested, please fill out the following information on the back of the questionnaire enclosed with this issue of **mathNEWS.** Deposit the questionnaire in the **mathNEWS** mail box or bring it to MathSoc. Please include: (1) your name. (2) your Waterloo address and telephone number. (3) your Ottawa address and telephone number (if known). (4) an indication of how often you would expect to attend (ie: i) almost always ii) most of the time iii) rarely iv) don't know v) other). (5) whether or not you would be interested in helping to organize these activities. (6) any comments or suggestions. Please be sure to respond if you are interested. Feel free to contact Steve Risto at MathSoc if you have any questions. Let's make the fall work term a fun one!

C.A Corner

A little while back I was accosted by the editor of **mathNEWS** who informed me that at times there have been half-serious suggestions to change the name of this publication to CS-NEWS since almost all articles that appear are computer science oriented. After a philosophical discussion (to which I contributed little) we couldn't figure out why only CS students write for **mathNEWS.** So how about it? Are there any C.A.'s out there willing to contribute and stop this horde of transistorized CS students from gaining complete domination of this rag? If so, just write something, slip it in **mathNEWS**'s box and soon you'll see your own words printed for thousands (hundreds?) to see!!

T-SHIRTS: The shirts will display a red "C.A. Co-op" emblem on a powder blue background and will be in two styles; 1) a crest on the heart, and 2) a full-sized chest emblem. T-shirts will also feature the buyer's graduating year!

T-shirts should be available to those who ordered them around July 14. Watch **mathNEWS**, the M&C 3rd floor bulletin boards and the Accounting Lab boards for more info, or call us!

D Larry Hancock (& Crew)
885-0108

Half Duplex (Son of Full Duplex)

LUDWIG von ZOPFAULT

Let's stay here in the ivory tower, where it is nice and safe from all the harsh realities of the outside world. Why should we care that the majority of us will be dead before old age gets a crack at killing us? No-one in this place seems to give a damn about anything but their own self-centred habitat.

Guess what.

I'm in a bad mood, and **YOU** out there are going to be the ones who pay for it.

No doubt the majority of you have heard of the Club of Rome and their studies, but for the few of you who haven't, a few brief explanatory words.

The Club of Rome is in international group of scholars, with the stated purpose of examining humankind and associated problems. They achieved notoriety with the publication of the book, "The Limits to Growth", which ruffled a few feathers with its statement that humankind *in general* has about forty or fifty years left to it — *without* having to have a major (nuclear) war to get us all killed. Basically, what they did was to attempt a computer simulation of the general features of humankind over the near future, taking into account such things as population growth, food production, pollution, finite resources, and the like. The result, using presently known information and the most probable extrapolations, was doom in under a half century. They tried other assumptions — birth rate constant, pollution is not to be worried about, infinite resources — and, at best, came up with the scenario that humankind *might* have until the year 2100 to live. And that's it.

Immediately, this prediction was attacked on many fronts on varied grounds, such as: not using a sufficiently sophisticated world model; basing the projected world economy on capitalism, not communism; roundoff errors caused all the predictions of doom; to the statement that the god of **TECHNOLOGY** will yet save humankind from itself. Clearly, some of these points could have some validity. In the main, however, it sounds more as if the ostriches have suddenly had the sand kicked away from their heads, and they are desperately thrashing around for more soothing ground. Especially the reliance that **TECHNOLOGY** will prevent humankind from going down the tubes. Not bloody likely. Science may be able to work wonders, but outright thaumaturgy is still beyond us.

Which brings me back to the opening lines of this article. At the time when people should be screaming their heads off, trying their damndest to exercise their common sense — which, contrary to popular action, is not *totally* dead — the vast majority are content to sit and blissfully accept that doom impends, but as long as their creature comforts are not directly threatened, why should they give a shit? For all the stupidity and mistakes, the dynamism of the sixties was the last real chance to get the great unwashed into gear. But the leading proponents of those times are now either dead or disheartened — the mass of humankind was just too oppressive — and few have replaced them. Inertia and insensitivity rule once more. The evidence of this is all around — the hard sell is back, since innovative ads and approaches persuaded people to think, and thus sold less of the product; tapioca TV programming spoonfeeds predigested pap to the populace (what was the last boob-tube show which exercised *your* intelligence?); you're reading this and it isn't bothering you a bit, what I've just said; governments preaching the virtues of self-restraint whilst they run in cancer mode — and they get away with it...the list is immense.

We are running short — very short — of time, if indeed, we have not run out. The only hope is that doom is inevitable if nothing is done — even the ostriches amongst us agree with that — and this may yet jolt people into thinking. But I am not very hopeful.

And now, in closing, a couple of semi-relevant **GROOKS** to further enlighten your day:

Modern man
has the skill
he can do
what he will.
But alas —
being man
he will do
what he can.

Only hoping isn't what
gives us strength to cope.
Let us only hope; but not
only only hope.

Happy birthday, Canada.

TO THE RARELY WRITING GHOSTWRITER:

Why so sad and woebegone?
Will the world not heed you?
Courage! Even you have won
friends you may rely upon
when they really need you.

exams rolled back

It has long been complained that the spring term exams were unjustly squeezed into 7 days. Many stories have been cited of poor unfortunates having 3 or 4 exams at a stretch.

Well, in January of this year, the personae of Drs. Cross and Goodman led a drive to have the summer exam period extended to 10 days. This moved through committee to Math Faculty Council who forwarded the recommendation to the University Senate. The Registrar, C. T. Boyes, enquired about and discovered favouritism to such an act, and forwarded his support to the Senate. Thusly, at the Senate meeting of Feb 17, in a great humanitarian gesture, the exam period was lengthed.

Unfortunately nobody bothered to tell us — the poor co-op students. There existed many opportunities for communication of the change:

1) our co-ordinators could have told us.
2) the Faculty could have sent a note.
3) the Registrar could have made an enclosure when sending tuition bills, schedules and receipts, or typed an addition to that slip of paper stapled on the calendar.
4) there could have been hundreds of signs plastered around the math building.
5) ad nauseum.

So when this news was communicated by Gerry Rivers (3A math) to **mathNEWS** it was passed onto hexad for possible action. He, in turn, asked MathSoc Council if such a thing needed attention and was given a mandate to do some friendly crusading.

Anyway, as the story goes, hexad approached Cross and Goodman, and the situation explained: i.e. that although the change was very nice in principle we were not told in time — hence plans have been made to return to employers, take vacations, etc. based on the dates in the calendar. The gentlemen were taken aback with the information that the change was effective this summer and pledged to do their best to reverse the move for this year. The Registrar was then asked to keep all our exams in the original 7 day period. With the additional weight supplied by our Dean Forbes this was done.

Hence the exam schedule posted this monday past ends on the 7th of August, as per the calendar, throughout the whole university. All darts and laurels can be directed towards your friendly neighbourhood hexad.

It is interesting to see that this extension of the exam period, while a very welcome act, was bungled. No person or group would accept responsibility for not telling us. Times like these students grumble quite truly that we are indeed just numbers!

73130694

Unseasoned Multi-Trob

At the present moment, the Honeywell is indeed up and (more or less....) running, although derail tasks are waiting 40 minutes because we are only running on 102k, hanging the terminals they are submitted from, but I am told that with the current parity error on the Datanet (that bell is driving me nuts — it's almost as bad as listening to disco) it should not be running at all.

This week's major topic is multiprocessor systems. The "classic" multiple-CPU system is probably CDC's 6000 series, typically consisting of 12 processors in parallel. Naturally, one has to resolve conflicts between processors, so innovative operating system design was a necessity. What happens is that one processor serves as dispatcher for the system (a system of this sort is most useful as a fast heavy-duty number-cruncher), handing out jobs to the others as they become available. The neatest part of this is that it is almost impossible to crash. If one of the processors crashes, the dispatcher tells another to "boot" it, and if the dispatcher goes down, the next processor to complete its job allows a limited amount of time for the dispatcher to give it another. If none is forthcoming, the dispatcher is assumed to have crashed and the first processor "detecting" the crash takes over as dispatcher.

Systems like this are good for throughput; the number of jobs/hour is high. Many people, however, would like to run parts of a single program in parallel on multiple processors. This generally involves user specification of program segments which can be executed non-sequentially. This would probably work much like PL/I's "multiple tasking" feature (which was previously rather pointless, because one only really had one CPU), allowing specified program segments to be handed out as seperate jobs.

Another alternative is the ILLIAC 4, an array of 64 processors. This is a less general system, used specifically for rapid processing of large arrays. A similar arrangement of microprocessors, called a "Hypercube", is also possible.

IBM has taken an interest in multiprocessing with the 370/168. First, they produced an operating system called (guess what!) MP. This system allowed two /168's to perform as a single system. More recently, JES-3 allows three MP pairs (total of 6 CPUs) to form a single ring. JES-3 allows one processor to boot another, too.

The most recent IBM product in multiple processing is the AP (attached processor) system for the /168-3. The additional instruction processor is said to improve performance by up to 70%.

A fair amount of work is being done at Waterloo on multiple processors. Morven Gentleman of MFCF is currently doing software development on the Texas Instruments 990 in the minicomputer lab, which will eventually become the main processor in a ring network of 81; the others will be microprocessors with the same instruction set.

Also, the Computer Communications Networks Group (CCNG), located in Engineering 4, has 4 of their 6 PDP-11's interconnected for research. The head of CCNG, Walter Banks, has no objection to students using the system, but with one qualification: it is a research installation and some productive research for CCNG should be handled.

The CSC visited CDC's plant in Mississauga Friday. Among the interesting information provided was the history of a group called COMMA. It seems IBM got about 4 people to do a study on maintenance price levels, with a specific view to how worthwile it would be to a businessman to enter the field as a third-party maintenance and refurbishing company for 360s and 370s. The study concluded that current IBM maintenance charges made it quite lucrative to others to enter this field. While IBM management pondered the report, the group who had written it quit and formed COMMA, a company who did nothing but maintain and refurbish 360s and 370s, which has since been acquired by CDC.

And now for something a little different; **mathNEWS** presents the INTERESTING_ALGORITHM_OF_THE_WEEK. This week, the algorithm consists of 3 lines of assembler:

```
xor  a,b
xor  b,a
xor  a,b
```

which may not mean much to anyone who is not familiar with assembler. (The XOR operation stores the Exclusive OR of two arguments into the second one.)

What is by no means obvious is that this is equivalent to the common swapping process (also 3 instructions):

```
mov  a,c
mov  b,a
mov  c,b
```

Each exchanges the values of a and b, but the elegance of the upper method is that it does *not* require space for c. One could not ordinarily do this in a high-level language, but in that case the savings in space become insignificant.

An interesting phenomenon has been noticed among the output boxes on the third floor. At certain pseudo-random intervals, output is filed by the operators. At other totally-random times, users come to pick up output. If there is a large stack of output in the appropriate slot and the user has not picked up outputs for several days/weeks/months, there is a large probability that they will have to search the entire stack; often this involves inverting the stack.

As a result, older listings drift towards the center of the stack and new listings are added to top and bottom, so that average age as a function of stack position approaches a bell curve.

And now, what you've all been waiting for: the COMPUTER_OF_THE_WEEK. This week we feature WATPCF (alias WATCOW). Admittedly, this system was covered extensively in last week's Gazette, where you can refer to it if you're interested (I know that none of you *read* it, but it is available), but certain details were not made clear.

The system consists of a PDP-11/10, a Volker-Craig as console, a card-reader, a printer, and one or two disks, with 8K of memory. Two software systems are available; one, which provides FORTRAN, COBOL and BASIC (MONECS) is from Monash University in Australia. The other provides WATBOL-11 and WATFOR-11-S, which we assume is what the Gazette referred to as "FORTRAN and COBOL".

Footnote: WATBOL-11 and a WATFOR or WATFIV compiler for the PDP-11 are to be distributed with WIDGET (Waterloo Interactive Debug Garbage Entry Terminal), and/or WIDJET (Waterloo Interactive Debug *Junk* Entry Terminal) as part of the package. This is fine with <10 users on, but at full load putting job execution on the editting processor will cause response times to skyrocket.

Trob Littirs

Dear Trob:

I have some extra dynamite kicking around the house, not being put to any good use. Do you have any suggestions for creative uses I could put these sticks to?

Having a Blast

Dear Having:

I highly recommend you see the Hacks (see want ads). They need some of those sticks for a humanitarian and pollution-(noise)-eradicating project — destroying that bane of the eardrums, disco music.

OUR Poetry Section!!

((found in the UNIX room MC6198))
Lyrics by;

Bic, Mick, Hic, Quick, Tic, Hoop, Hema, and Bud.

To the music 'Ben'

Brown, the group of us need work no more,
Probability is such — a bore!
With a problem of my own
I'll never be alone
And you my prof will see
You've taught a dope, that's me.

Brown, you must wear coloured underwear,
Least, we know we've never caught you bare!
When, you're searching in the night,
For socks without a light,
The prob is n choose 2,
You're sure to find a few.

I used to say,
I was smart,
Now I'm back,
At the start.

Dickey, you're always running here and there,
APL/360 everywhere!
Compression really blows my mind,
The symbol I can't find,
You're really a great prof,
And now we must sign off!

The Relevant Contribution of M340A in the Area of Developing One's Aesthetic Appreciation of Nature or, Why I Like Dem Trees

I think that I shall never see
An array lovely as a tree.
Indeed if trees could grow quite tall
I'd never use linked lists at all.

And
stack
is such an ugly word.
Do you think you could afford
The time it takes to sort a stack
And keep the shunting yard on track?

To access an n-D array
Could take forever and a day.
But with a tree, just find the root,
You'll
always
know what you're about!

I don't like queues (they make me think
Of family lineups for the bathroom sink).
And deques are worse in double measure
They're twice as bad, who says they're better?

A tree is such a pretty thing.
Leaf, root,
and
branch:
they sound like spring!
It's very much one's own creation:
You add a leaf, make variations.

I'll remember to my dying day,
This lesson from 340A:
A tree is such a joy to see
Especially when it's binary!

"Hearts of Core" (by arpepper)
(to be not sung to the tune of "Hearts of Oak")
(brisk march — with triumphant enthusiasm)

Come, cheer up my hacks, 'tis to glo-ry we steer,
The prize more than all to a programmer dear,
We shall rule the world through the use o-of "B" —
If not "B" maybe "C" or perhaps even "D".
Chorus:
Hearts of core our ma-chines,Jolly hacks are our men
We always are ready! Steady boys, steady!
We'll try and we'll crash her again — and again!
We ne'er see our "Blues" but we wish then to stay
Typing hard all the night till the break of the day!
— If it weren't for sleep-ing and getting our j00s
We'd put all of our time to this glorious use.
(Chorus)
Not a bit nor a priv-lege shall go un-disturbed
E'en though those in charge be-come rather per-turbed;
— Normal peo-ple ab-hor us, but they are such zits
For who are so free as the sons of the bits ?
(Chorus)
Don't mis-under-stand us; we do wish to serve
Man-kind by wri-ting with a-ll of our verve
Decent pro-grams and soft-ware that relieve man's pain
— And finding the bugs and re-writing again!
(Chorus)
For we are the hacks of the M-F-C-F
And we'll chase those bugs 'til there's no bu-ugs left!
But then what would we do ? — It would be a bore —
It's clear that we must add a few bu-ugs more!
(Chorus)

PHOTON TYPESETTER ON STRIKE

Welcome to the closing of issue 11.3 -- this week is a gala issue (with a poetry section no less!!). mathNEWS is an all-volunteer production, financed by, but independent of, MathSociety. Home = MC 3038. This particular copy was produced over 15 days, for a couple of good reasons. day the first we discovered a total lack of news and enthusiasm, hence adjourned to the following friday, when we discovered problems with our photosetter. these problems continued up to today (yesterday, actually). Anyway, the problem she is no more, and we propogate again! Perhaps you noticed a few comments against the institution of disco into popularity. Well, although a few were actually written by the authors of the articles in which they appear, I suspect that the famed cgo has been monkeying with our files -- fess up varmint! This past while we have been many personages: including mad dog dillon (our I.S. original); bun of math as typist/author; the ever-present omnipotent dennis mullin; the inseparable russell crook & ludwig von zopfault; extraterrestrial q trob (throb?); tom keith (showed up after all had gone, but typed anyway); dryden (G of them) adding many llinks to his ongoing myth; and a tutor for some course. he didn't want to leave his name! thanx for typing the article; bun; prraynham with his wunerful burloaf; editor *hugh*
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