

# CARTER DEFEATS FORD

## Chevron Reopened

At a Federation of Students council meeting Sunday night, the student councillors voted to re-open the chevron after closing it four weeks ago. The chevron staff was instructed to pick an interim editor until the situation could be sorted out, (the whole incident started when the previous editor quit under supposed AIA pressure) and re-start publication of the chevron.

As of press time, the chevron staff had decided not to publish a chevron, but to continue to publish a free chevron, as the staff did not feel the council had done enough.

As reported in another article, the free chevron staff is closing in upon itself, and does not seem to be willing to re-open friendly negotiations with the Federation of Students council.

According to Dave Daunt (science representative), he was asked to leave a free chevron meeting, even though he had been in favour of the free chevron when students council closed the chevron.

When he attended a staff meeting, he was asked if he was pro Bullseye. He replied no. He was asked if he believed in all the objectives of the free chevron. He replied he was not sure. At this point he was asked to leave and did.

Apparently, if you do not have the preconceived notion that the Federation of Students council is all wrong, and the free chevron is all right, you are not

## CHEVRON MEETINGS CLOSED

In a surprising move, the "free" chevron decided Monday night that their meetings should not be open to all students (contrary to Federation policies, which state that all meetings of all campus groups must be open). Four students, Gary Dryden (Math & Engineering fieldworker), Doug Kernohan (Arts Society Social Director), Michael Dillon (mathNEWS editor), and Doug Antoine (Board of Entertainment Chairperson), tried to attend a meeting Monday night after having been invited Friday at the general meeting by one free chevruc to write for the chevron "now that the Bullseye is not publishing anymore". [Note: the Federation council re-instated the chevron Sunday night, after halting its production for four weeks].

On arrival at the meeting, the four students were asked to leave as "they had obviously come to cause trouble". One of the students explained that he had come as an observer and that he had no in-

welcome to work on the chevron.

One free chevruc was heard to say, after having been asked whether this process might tend to hurt student input into the paper, "we have all the staff we need".

Gary Dryden

tion of doing anything but observe. This statement was countered with the statement that physical presence was a disturbance. A debate amongst the free chevrics ensued. The students were denounced as "fascists" and "splittists" (although none had made a comment except to questions directed to them).

Comments such as, "they are trying to cause dissension in our ranks", (although not one statement of any type had been made by the students at this point), flew about.

Finally a motion was proposed that "all students who by their actions, have shown themselves enemies of the free chevron and the students of this campus, shall not be permitted to attend free chevron meetings".

[An ambiguity arose in the wording, as the free chevron staff and the chevron staff are one and the same, and one can not be sure when the collective is referring to itself as the free chevron (with closed meetings) or the chevron (which must have open meetings)].

The motion to exclude students was passed with only two chevrics voting against.

The four students then left.

Gary Dryden

FRIDAY, NOVEMBER 5, 1976  
VOLUME XII, ISSUE 6

# math NEWS

## PREREGISTRATION

All Co-op Math students, currently on campus, who will be returning for classes in the Spring 1977 term should pre-register during the period Nov. 10-12, 1976 with an appropriate Faculty Advisor at the times indicated below. Regular students who wish to pre-register for the spring 1977 term are requested to wait until the winter 1977 term.

- (1) All 1A and 2A Honours and General students (except 1A Honours Applied Math Option and 2A Co-op Teaching Option students) pre-registering for 1B and 2B respectively: Wed. Nov. 10 at 1:30 PM-3:30 PM, Thu. Nov. 11 at 9:30 AM-11:30 AM, or Fri. Nov. 12 at 1:30 PM-3:30 PM, in MC 5097.
- (2) All 1A Co-op Honours Applied Math (with Engineering electives): see (4) below.
- (3) All 2A co-op Teaching Option students (Honours and General) should pre-register with Prof. R. Scoins in MC 5199 on Wed. Nov. 10, 1:30-3:30 PM.
- (4) All students pre-registering for years 3 and 4 should see one of the following Advisors, according to area of interest. This includes both Honours and General.  
 Computer Science, V. A. Dyck  
Wed. Nov. 10 or Fri. Nov. 12: 10:00-12 noon and 1:00-3:00 in MC 5097.

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The time has come for the students of Canada to participate in decisions which will affect the future of post-secondary

# BURLOAF

There's labor-management trouble brewing at a drydock in Manchester, England. The management has recently laid off 30 cats and the union isn't happy. High level talks are going on between the union and management to discuss the fate of the cats who spent their time catching rats. The management claims the cats are loafing and as a result the cats' \$16/week food allowance has been cut off. A union spokesman says the cats are not loafing, but rather the rats are increasing too fast for the cats to handle.

## Unix News:

The Math Faculty's Unix facility is up again, sort of. The flaky hardware is still the cause of the odd difficulty, but the software is not allowing itself to be out-done either.

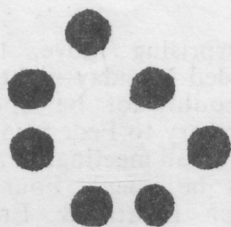
Randall Howard, a big shot in Unix land, was overheard a few days ago when he confided to a peer that "I'm getting a little bored with Unix." (For those who don't know Randall, this is like Billy Graham saying, "I'm getting a little bored with preaching the gospel.")

This week we present a featurette on Hack Tours International.

Hack Tours International, or HTI, was formed about half a year ago as a small organization for arranging trips to rock concerts and similar things. Since then it has grown until today, when it has the whole tour scene for the area pretty well sewn up. Arranging tours to see everything from Renaissance and Jethro Tull concerts to Shaw and Stratford festival plays, to the Mighty Taco's in Buffalo and Harvey's in Waterloo, Hack tours has squeezed all competition out of business. It was able to do this in a matter of months because of [1] high-pressure promotions, [2] grabbing the lucrative Hack market by using inside dealings, and [3] the fact that there was no competing organization to start with.

Starting with one person working out of a terminal room of a down system, HTI now possesses a proud fleet of busses. (well, actually a fleet of bus) (actually, it's a fleet of minibus) Now it's a common sight to see the HTI minibus leaving for another culture-fest, bearing that distinctive HTI logo, "Holiday Rent-A-Car".

HTI has just recently returned from a Steeleye Span concert, and in the work now is a second tour to see Renaissance as well as a trip to Strawbs.



I was talking to a CSC exec recently and he said that things are happening now. At the CSC, it's *the end of next week!* The membership cards are in and he says you can come to the CSC office and get yours any time of day that we're open for business. The CSC president left a memo which roughly stated: "You guys better organize a meeting or something soon. Just don't ask me to do anything." A CSC member (non-exec) is now singlehandedly organizing the CSC's entire program of action. On November 18th, Wes Graham will be giving a talk to the CSC.

There's a plan to redesign the CSC membership cards so that they have a row of eight boxes along the bottom. Each time a member got a hot chocolate at the CSC, a box would be punched. When all eight boxes are used, the member must join up again (paying another dollar) before he can drink more hot chocolate.

If you're a user of the Honeywell, chances are you know of Preston Gurd, who provides consulting for it, as well as being a programmer for same. You might have wondered what his official position is here. A quick look into the UW local phone directory reveals that W. Forbes is not alone, for Preston Gurd's position is listed here as "Dean of Math".

This week, in lieu of an INTEGER\_OF\_THE\_WEEK, we are presenting a SEQUENCE\_OF\_THE\_WEEK.

The sequence this week is the sequence of Catalan numbers, which runs:

1, 1, 2, 5, 14, 42, 132, 429, 1430, ...

This sequence gives such things as the number of rooted binary trees with  $n$  nodes, the number of ways a convex polygon of  $n$  sides can be divided into triangles by joining vertices of the polygon with straight lines, and the number of possible interpretations of the ambiguous mathematical expression  $a*b*c*d*$ ... ( $n$  terms), where  $*$  is a non-associative operator.

The  $n+1$ st term can be made by taking the dot product of the first  $n$  terms with the same terms in reverse.

The really nifty feature about this sequence stems from the feature that it is the most common sequence (it pops up in all sorts of combinatorial problems) that is not well known. As a result, this sequence has the honor of being the most discovered sequence. Two or three times a year, another high-ranking mathematician announces the discovery of 1, 1, 2, 5, 14, ...

## PANDEMONIUM WEEK!

This week is being sponsored by Math, Arts, Science, and Environmental Studies societies—M/E/S/A for short. The following schedule is still tentative:

### Sunday, November 14

Coffee House with Bill Hughes. Free admission. 9-12 p.m. in CC pub area.

### Monday, November 15

Film Night—"The Pink Panther", with Peter Sellers. Free for M/E/S/A members, \$2.00 for others. 8 p.m. in AL 116.

### Tuesday, November 16

Bridge Night. 7 p.m., MC third-floor lounge.

### Wednesday, November 17

Math Slide-Rule Competition and Society Challenge. 12:30 p.m., MC third-floor lounge.

Roller Skating. Buses will be provided to Bingeman Park. Cost \$1.25 per person.

### Thursday, November 18

Arts Spelling Bee. Noon, HH foyer. JJBT/Mathsoc Table Hockey Tournament. 75¢ non-refundable entry fee. All day, MC third-floor lounge.

Card night. 8 p.m. at the Grad Club.

### Friday, November 19

Broomball Tournament. St. Clements Arena, 9 a.m. to 5 p.m.

JJBT/Mathsoc Table Hockey Tournament. 75¢ non-refundable entry fee. All day, MC third-floor lounge.

Wine & Cheese Parties. \$1.00 M/E/S/A, \$2.00 others. 8:30-12 p.m. in MC 5136 and HH 373/378.

### Saturday, November 20

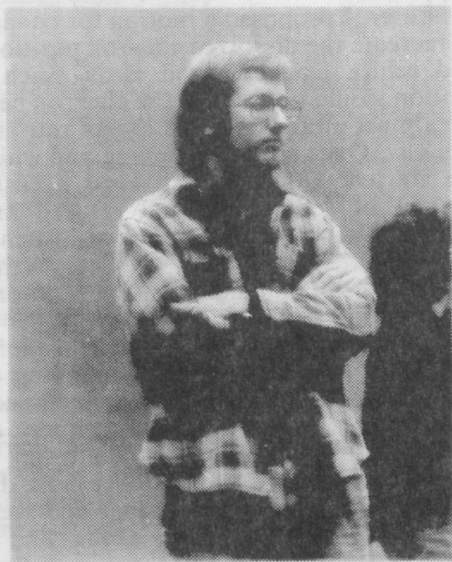
JJBT/Mathsoc Table Hockey Finals. 9 a.m. to 4 p.m. in CC Great Hall.

"Society Social" Semi-Formal with "Chelsea Morning". \$14.00/couple M/E/S/A, \$16.00/couple others. At Valhalla Inn, Kitchener. Bar opens 6:30; dinner at 7:30.



Participants at the General meeting included Michael Dillon of mathNEWS (above).

Discussion did not end when the meeting did.



## General Meeting Inconclusive

Once again the Federation has held a General Meeting at which nothing was accomplished. This meeting had to be adjourned because a varsity basketball game was booked to follow it in the gym. Part of the problem was that many of the motions proposed by chevron staffers were illegal and ruled out of order by the chair.

On the recommendation of the task force, many people voted to adjourn the meeting: it was felt that many of the motions were poorly planned. Chevron people, determined to have their way, voted this down and were determined that their motions come up first.

The only motion to be voted on was *By-law 28, Option 1* which met defeat. After this, procedural hassles and confrontations with the chair took up so much time that the meeting was forced to adjourn.

## MUNICIPAL ELECTIONS

Worried about

- crummy busing?
- lousy housing?

You can do something about it. Municipal elections are December 6—get out and vote!

You have an investment in this community: you're here for five years. So vote.

If you have not been enumerated, you may do so up until **today**, November 5, in the Federation Office (CC 135).

### Comments:

Believe it or not, these times are supposed to *include* time spent in lectures and tutorials.

Only students who attended class on the day of the survey were included. The more diligent students had a better chance than the slackers of being included in the survey. Thus *the workloads calculated will overestimate the average time spent by all students registered in the course.* (This is an example of "length-biased sampling.")

The fact that average workload *decreases* as the level of the course increases is a bit disturbing.

An average workload of 6½ hours per course would not seem unreasonable (6 courses × 6½ hours = 39 hours/wk). We certainly don't have many courses in this category! As it is now, it would appear that a good student could take 12 courses per term, and still have plenty of time left to play bridge.

## How Hard do Math Students Work?

by J. G. Kalbfleisch, Chairman, Statistics Dept.

Question 3 in the 1976 Anticalendar reads as follows:

How much time do you spend each week on the average working on this course (includes lectures, homework, tutorials, studying, projects, etc.)? (a) 0-3 hr (b) 4-5 hr (c) 6-7 hr (d) 8-9 hr (e) 10 hr or more.

I scored these responses as follows: (a) 2 (b) 4.5 (c) 6.5 (d) 8.5 (e) 11.

Then I computed a "workload" for each course reviewed. Where there were several sections of a course, I used the table of cumulative totals.

*Example.* For Math 130, the table of cumulative totals gives (a) 6% (b) 19% (c)

47% (d) 22% (e) 4%. Percentages are rounded down, so total is only 98%.

Workload =  $.06 \times 2 + .19 \times 4.5 + .47 \times 6.5 + .22 \times 8.5 + .04 \times 11 = 6.34$  hr/wk.

Then I sorted courses by "workload", and prepared a table for each year. I also computed the average "workload" for all courses by year. 1st, 2nd, 3rd, and 4th year courses respectively averaged 6.10, 5.13, 4.92, and 4.70 hr/wk.

Finally, I sorted 3rd and 4th year courses and computed average "workloads" by department: STAT, 5.91 hr/wk; CS, 5.36; faculty courses, 4.42; PM, 4.41; C&O, 4.03; and AM, 3.92.

## CO-OP MATH FED REP D. E. McDOUGALL REPORTS

As a student of Co-op Math, you should be aware of your Fed reps and what they have been doing. Since I am one of the two Fed reps in Co-op Math, I would like to explain my work and position on council.

I am very much in support of a student security patrol on campus. As the details are still being worked out, no press release is available. If you have any suggestions on this or any other Federation activity, please feel free to get in touch with me through the Fed office CC 235, Mathsoc office MC 3038, or demcdougall on TSS mail.

A joint committee on social and living needs and educational opportunity, of which I am a member, has been set up. It is to deal with co-ordinating the activities of several Federation boards involved in these issues. The first and foremost issue has been National Student Day (NSD). I am working on the topic of Student Aid and Tuition Hikes. On National Student Day, which is Tuesday, November 9, a representative from OFS, the Student Awards Officer, Dave Reynolds, and myself will be found in cc 135 from 11 A.M. to 1:30 P.M. for a discussion and for students to ask any questions concerning these topics. Many other topics will be discussed in the Campus Centre on this day so get involved in your University and help make this day a success.

Another topic which may interest you is the municipal elections which will take place on Monday, December 6. If your name is not on the voters' list and you intend to vote, you must fill out an application by today, Friday, November 5, to this effect. Application forms are available in CC 235 (Fed office) or from the clerk of Waterloo.

The final topic of this article is the chevron. What should be done? I found the chevron, before September 24, to be a poor student newspaper and not something I wanted my money sunk into. We must get more student voice in a newspaper which is paid for by undergraduate students. I think that, as editors of the student newspaper, they should be responsible to the student body. Right now, unless a chevron comes out under that name, I think action should be taken so we can have a student newspaper under student guidance. I wish you would relay your views on the subject through any of the above-mentioned routes.

Don't forget NSD on November 9. Let us show the public we want action.

D. E. McDougall

## FEDERATION

On Sunday, Fed Council voted to re-establish the chevron. Included with the motion was implicit recognition of the rights of "free chevron" staffers as chevron staff. Also, a committee of five councillors and five chevron staffers was set up to investigate the whole "chevron affair".

Despite this gesture of goodwill, which may seem as a virtual capitulation to chevron demands, many chevron people were unhappy. Neil Docherty and new grad-rep Larry Hannant criticized council's move. Such strong chevron backers on council as Heather Robertson, Donna Royere and Hannant voted against the motion. I got the feeling that some chevron people were going to complain, yell, and pout regardless of what happened.

Later, I proposed a motion for council to recreate the dissolved chevron positions and rehire Docherty and Hess. Such a motion would have given the chevron people almost all they wanted except retroactive pay. Once again the yelling and whining started. Docherty and Hess accused council of selling out and refused any compromise. A council upset with such a chevron attitude voted to defeat this motion, with Hannant and Rogers among those voting against.

After the meeting ended, I left, somewhat disgusted with the handling of the chevron affair by the Roberts administration and with the attitude of chevron staff. With Doug Thompson, I visited the chevron office to see how the so-called democratic newspaper operates. Upon entering the office, Doug and I were, in the words of one chevron staffer, subjected to an inquisition from many of the chevron staffers. There I became convinced that the chevron is not democratic, but only claims to be (as Communist China claims to be democratic). Doug personally was subjected to many attacks from Docherty and Rob Taylor for his role in the Bullseye.

Perhaps Docherty was showing us how an AIA or CPC-ML self-criticism session operates. Generally it seemed that the radical (or noisy) line dominated at the staff caucus. The chevron people seemed unwilling or unable to negotiate or compromise despite Docherty's past appeals for "dispassionate discussion".

It seemed that the chevron staffers were out for blood and won't be satisfied until all their demands are met, and then they still might complain. Docherty, who was labelled as a fascist and a racist by the famous black radical Stokeley Carmichael, now feels free to apply such terms to anyone he considers a political opponent at any particular time.

While I am upset at AIA members and some chevron staffers, I also am dissatisfied with Shane Roberts' leadership. While I previously had not supported Roberts, I had been supporting him recently because I preferred his stand to that of the other alternative in this issue. Recent statements by him make it clear to me that he can no longer handle this situation. He seems to be strengthening rather than weakening the AIA. His present position on this issue seems to be untenable and I am presently, along with other councillors, developing an independent third alternative.

I believe the chevron should be under the control of the students who pay for it, not some elitist faction of staff who try to force their political line on the paper and the university. Also, I do not feel that Federation leaders like Shane Roberts should use the paper to enforce the Federation position.

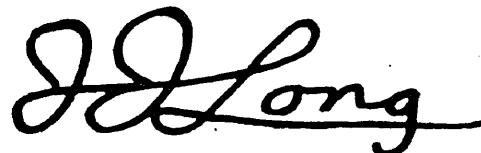
To help accomplish this, I will support a referendum calling for separation of the chevron from the Federation. I would also propose a voluntary chevron fee, and an owner- (i.e. student-) controlled as to a strictly staff-controlled newspaper.

I may even propose a conciliatory motion to the chevron, though my patience is running low.

Your comments on this and other issues are welcome in calls, letters, and personal visits. I am usually available at Mathsoc.

Also, this coming Monday, the day before National Student Day, I will hold one of my periodic Meet-Your-Fed-Rep sessions in the MC 3002 lounge at 12 noon.

There is no time for a Hack-of-the-Week this week, but if there was it would've been P. R. Raynham.



# STEELEYE SPAN

There is no adequate way to introduce *Steeleye Span*. With both traditional and modern instruments, Steeleye Span play primarily English traditional folk. The effect is awe-inspiring. The level of musicianship is very high; the clarity and power of Maddy Prior's voice is probably unparalleled. Steeleye were at Convocation Hall, U of T, on October 22—if you weren't, you missed a superb concert.

Soon after arriving at the front of Convocation Hall, we realized this was to be no run-of-the-mill concert. We stood outside, listening to Steeleye rehearse and played "I am Going on a Trip" with total strangers. A crowd soon gathered, but not the usual Yahoos. For the first time ever witnessed, the audience sincerely cheered the *no smoking* announcement. Also it seemed many in the audience were themselves musicians—Bob Bossin (*Stringband*) was wandering about the audience, as was another fellow looking for friends to form a new group.

The concert opened with *The Original Sloth Band*. We were unfamiliar with them, but were very pleasantly surprised. To their evident amusement they were brought back for an encore. After that they put away their instruments, and took their seats for Steeleye.

Steeleye quickly warmed to the audience after a perhaps hesitant start. Maybe they were alarmed at the incredibly enthusiastic response. The stage set-up was obviously geared for touring, so it was somewhat austere, but Convocation Hall was the perfect place for the performance.

The program of the concert was mainly material from the new album *Rocket Cottage*, but also included much from *All Around My Hat*. Seeing Steeleye live after being so familiar with their albums proved nearly overwhelming. They also seemed to be enjoying themselves. Maddy's jig after "Come Ye Oer Frae France" and the unaccompanied singing were particularly well received. The highlight of the concert could have been (but wasn't) the band all singing "I'm Forever Blowing Bubbles"—even though the bubble machine didn't work.

There is some question of the validity of "Electric Folk" or "Folk-rock" in traditional music circles. Towards the end of the concert however, with people dancing in the aisles, Maddy tossing flowers, and the rest standing and madly clapping, only appreciation was evident.

Thanks to Mardi for getting us to Toronto, and to Larry for getting us back. Return from Toronto after late concerts seemed laughable.

fieldmice

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 mail subsystem on TSS to userid mathNEWS.

Lost: One \$1 bill (serial #GR6728078). Great sentimental value. Contact 519 via MIDJET wail.

Come back, Stan and Bobby. All is forgiven. Someone in the Antti Lepannen Memorial Division needs you!

continued from page 1...

CA, RIA and Business Options, R. G. Dunkley Wed. Nov. 10: 2:30-3:30 or Fri. Nov. 12: 1:00-3:00 in MC 5097.

Combinatorics & Optimization, C. Haff Fri. Nov. 12: 2:00-5:00 in MC 5025

Statistics, C. Springer Wed. Nov. 10: 2:30-3:45 or Thurs. Nov. 11: 10:30-11:45 in MC 5039

Actuarial Science, F. Reynolds Wed. Nov. 10 or Thurs. Nov. 11: 10:00-12 noon in MC 6092A

Applied Mathematics, M. Snyder Thurs. Nov. 11 or Fri. Nov. 12: 1:30-3:30 in MC 5007

Wanted: Apartment to sublet in Toronto for winter term. Must be near bus or subway lines—preferably in Don Mills. Phone Peter at 444-7630 in Toronto, or Phil at 884-0759 in Waterloo.

For Sale: Gold-encrusted, ivory-inlaid mahogany coffin: \$14,000. Reason for sale: Owner passed away. Reply box 46 Mathsoc.

For Sale: An 84-cup Regal coffee urn. Terrific for exams. Not bad for spider plants and philodendrons. \$42.50 or best reasonable offer. Call 885-6282.

NOTICE: I have your daughter. Please send \$10,000 to dpbrown c/o TSS or you will not see her again. Do not contact the F.B.I or the A.I.A.

Wanted: 11 other virile male students to help attack one of the nightly convoys through the Optometry path. Meet Monday, November 8, by the Optometry building.

Fred Fourreur

## National Student Day

Tuesday, November 9, 1976 is "a day for students at UW and across the country to discuss solutions to the problems that they face." Such as: "Student Aid and Tuition Hikes, Education Cutbacks, Housing (Shortages and Quality), Jobs and Unemployment, Municipal Elections."

It was invented by the National Students' Union, and is being supported by provincial and local groups such as OFS.

At UW, it's being organized by Diana Clarke and mathNEWS's Mike Dillon. The following workshops are to be held in the Campus Centre:

Women and University (11:00, CC 110)

Housing (11:00, CC 113)

Student Aid and Tuition Hikes (11:00, CC 135)

International Students (12:30, CC 110)

Jobs (1:30, CC 113)

Educational Cutbacks and the Quality of Education (1:30, CC 135).

## New C&O Course

Are you taking linear algebra at the moment and wondering what the point of it all is? If so, you might be interested in a new course being offered next term by the Department of Combinatorics and Optimization. It's called "Introduction to Combinatorial Mathematics", and it's designed specifically for honours math students who would like to learn something about graphs, designs, and enumeration. Applications of linear algebra in all three areas will be covered. The only prerequisite is Math 231A (or equivalent).

If you'd like to take the course, or find out more about it, get in touch with Professor Bondy. His office is MC 6138 and his phone extension is 3585.

## Students, Rise and Defend Yourselves!

Recent disclosures of first-year student test averages have badly maligned the University of Waterloo student's natural language talents.

Some of us are skeptical. Here is a way for a few to offset some of this slander.

SIAM News is a trade publication of the *Society for Industrial and Applied Mathematics*. It wants to publish student-written articles and is willing to pay freelance student authors.

For details see the editor, E. H. Rogers, in MC 5164 or via extension 3688 or Honeywell mail to userid ehrogers.

# JJBT Bites Dog

*A chicken is the way by which an egg creates another egg.*

Merlin

In a course in Human Genetics (Science 251) taken by two JJBT members (Owen Leibman and Peter Wettlaufer) and an associate member (Brian Pelly), a question on one assignment was (believe it or not): *Which came first—the chicken or the egg?*

On seeing this question, Merlin immediately came up with the above response.

A far easier question to answer is: *Which came first—JJBT or winning by default?*

Of course, teams won games by default before JJBT had been conceived—JJBT merely perfected the art. This past Sunday, in fact, the team reached a new pinnacle. When the members showed up for their water polo match, not only were their opponents not there, but the officials were also absent, and, indeed, the people who opened up the door to the pool also had not shown up. The opponents had obviously spent a lot of money in bribes to ensure that they would not be humiliated in head-to-head competition with JJBT.

The previous Sunday, JJBT had another default victory, when only two of their opponents showed up. JJBT thus split up the team, and had players playing for both sides. "Errol" Weber, playing his first game of the season for JJBT, and Catfish formed one of the most devastating forward pairings in water polo history, with Errol getting two goals and four assists, and Catfish getting five goals and one assist. Our scheduled opposition for the next week were probably scouting this game, and came to the conclusion that they shouldn't take on JJBT after studying the play of Rebecca "Jaws" Berkelhammer, who was a constant threat to everything in the water.

In the game which was scheduled after that one, one of the teams did not have nearly enough people, so they asked JJBT to play for them. This game saw Ron and Petec positively shine on several passing combinations which had the opposition absolutely mesmerized. Boon, Mike, and Sylvia turned in their usual effective two-way games.

After a one-week absence, "JJBT Thursday Night" returned on October 28, to the unbridled joy of volleyball fans everywhere. Our opponents on this occasion were the EBA's, who secured a place in history by being the second of our opponents this year who were able to field a team.

Shaken by the fact that they had not won the match before it started, JJBT dropped the first game. It was then that the strategists on the team went to work. It is a well-known fact of football history that the T-formation revolutionized the game. The team therefore decided to see

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	R	E	S	T	O	R	E	X	C	H	E	M	I	S	T
B	A	R	O	U	N	D	X	A	X	P	L	E	A	T	H
C	D	R	O	N	E	X	P	R	T	X	A	S	T	R	E
D	I	O	N	A	X	A	L	G	O	L	X	A	R	E	A
E	A	R	E	X	A	R	I	X	N	E	T	X	O	A	T
F	T	S	X	K	E	P	X	S	X	D	U	K	X	M	R
G	E	X	L	A	F	X	P	L	Y	X	V	A	T	X	E
H	X	R	A	T	X	Q	U	E	E	N	X	T	N	C	X
I	S	X	C	H	E	X	G	E	S	X	C	H	E	X	R
J	O	S	X	Y	O	D	X	Z	X	A	N	Y	X	C	E
K	D	E	L	X	M	R	L	X	C	S	R	X	S	H	E
L	A	N	A	T	X	C	O	B	O	L	X	T	E	A	L
M	A	I	S	H	A	X	G	T	B	X	P	E	A	L	E
N	S	L	E	I	G	H	X	D	X	L	E	T	T	E	R
O	H	E	R	S	E	L	F	X	F	O	R	E	S	T	S

what effect a T would have on volleyball. When it proved successful, an I-formation was also tried. It also met with moments of success, although not quite so frequently as the T.

The next move was to line the entire team up behind the service line, and charge the net when the opponents served. This strategy usually failed, although Rob Takimoto, the undisputed star of the match, managed to return a serve in bounds with his head. The stunned opponents just watched as it dropped to the floor for a point. Among the other plays which Rob made during the game were a serve with his back to the net, a running serve, and a serve off Petec's head.

By far the most successful strategy, however, was employed while JJBT was serving. Everybody on the team (except the server) started moving aimlessly around the court, and did not stop until the point was over. This "mill and loaf" strategy was so effective that I can easily foresee the day when it will be standard procedure on volleyball courts across the world.

## Suffering from those Post-Kaiser Blues?

Why not treat yourself to a little after-lunch entertainment? Just mosey on down to Modern Languages and take in a multimedia art show in the Art Gallery. The exhibit, "Eight on the Ball", features works by 8 artists and it presents a full spectrum of media (barnboard paintings, pastels, watercolors, oils, silkscreen, and more) in techniques ranging from abstract to high realism. The exhibit runs through November 24 and admission is free.

Those who are on the ball will also notice the *Potters Showcase* going on in

### Liona Boyd—Guitarissima!

Even if your Physics teacher told you all about harmonics, it never sounded this good! Liona Boyd, classical guitarist extraordinaire, will provide a treat for the ears at UW on Friday, November 12, and

the lobby of the Modern Languages Building. The Waterloo Potters Workshop, a flourishing cooperative of 140 potters, will have ceramic sculpture as well as functional and decorative wares on display. The UW exhibit closes November 28; admission is free and viewing hours are 8 a.m. to 10 p.m. weekdays and 2 to 5 p.m. Sunday (closed Saturday). Note: The annual Workshop Christmas Sale takes place this year on Saturday, November 27, at the First United Church, Waterloo.

Saturday, November 13. Tickets are on sale at the Modern Languages Box Office, extension 2126, at \$2.50 (students and seniors) and \$5.00 (others), but Friday is sold out, so hurry!

# Gridcomment

The creators of last week's *Gridword* have mysteriously vanished. All I know is that there were 3 submissions and the winner is

4F

This week's *Gridword* is a Double-Crostic by Mark Brader, Owen Leibman, and the Honeywell 6060 (Honeyapple was used to assign the numbers, so there is no possibility of an error). For those of you who are unfamiliar with this type of puzzle, here is a description: Each of the clues from A to X is to be answered like an ordinary *Gridword* clue and the answer filled in the spaces beneath the clue. Then the letters written in are transferred to the corresponding numbered squares in the solution blank. When you have enough letters in the solution to start filling in words there, the letters attached to the numbers in the solution blank direct you to where you may transfer these letters downward into the clue blanks.

Words in the solution end only at black squares; end-of-line in the blank means nothing. Upper and lower case are considered equivalent. All punctuation marks are *dropped* except those in the middle of words (like apostrophes). Two of this latter type occur. They are #104 and #206.

The solution is a quotation. If the first letter of each of the clue words is taken, the result is the author's name and the title of the source of the quotation.

This barrage of unusual tactics completely wilted the EBA's. By the end of the game, they just didn't know what to expect next. The result was another JJBT Follyball victory, and it remains to be seen if this mighty juggernaut will ever be defeated at this game.

For those of you who have not yet heard, JJBT and Mathsoc are having a table hockey tournament as part of Math-Arts-ESS-Science week. The tournament is divided into three sections—singles, doubles, and mixed doubles. Entry fee for each is 75¢.

Entries can be made at Mathsoc.

27A	27B	27H	30A	31T	32O		33L	34I		35A	36L	37M	38G	39H	40B	41G	42L		43A	44A	45E		46L	47E	48A	49A	50A	51E	52A		
		55A	56P	57D		58L	59G	60T		61Q	62M	63X	64L	65W	66S		67B	68O	69J		70V	71X		72V	73E	74R	75L	76V	77S	78A	
		81S		82G	83U	84O	85G	86Y		87D	88L	89L	90Q	91Q	92V	93C	94S	95L		96K	97M	98B		99J	100X	101R	102H	103O	104X	105L	
	97P		108A	109E	110G	111U		112X	113W	114L	115L		116V	117G	118C	119F		120L	121D	122H	123A	124A	125W	126S	127R	128R		129C	130U	131I	
132C		133K	134O	135I	136G	137V	138J	139K	140H	141L	142T	143M		144O	145S	146I	147C	148L	149C		150X	151N		152A	153E	154R	155O	156L	157R	158J	159J
		161E	162R	163U		164V	165T	166O	167L	168E		169W	170N	171B	172B	173Q	174S		175C	176T	177O		178N	179L	180X	181I	182G		183L	184E	185A
186C	187E		188T	189I	190F	191V	192P	193B	194J	195W	196C	197N		198S	199R	200Q		201I	202B	203L	204W	205A	206C	207R	208H	209B	210L	211L		212V	213G
		214F	215R	216L	217H	218L	219V	220F	221H	222V		223D	224H	225X	226C		227L	228I	229S	230C	231D	232H	233K	234R	235B		236N	237G		238C	239O
240H		241C	242V	243K	244X		245A	246I		247P	248F	249E	250B		251F	252J	253T		254S	255L	256J	257I	258B	259O	260L	261S	262J	263M			

IDENTIFICATION DIVISION

PROJECT NO. \_\_\_\_\_

DATE \_\_\_\_\_

A Revised monetary evaluation [2 words].

6 205 123 48 35 43 152 47 18 30 245 23 124

B Our discipline Graecized [sic].

193 40 67 202 98 250 172 171 258 235 209

C Seesaw.

230 226 118 129 149 147 206 175 8 93 10 24 11

D Telemachus's father.

121 223 57 3 213 231 87

E Flowering evergreen.

19 109 79 75 161 168 45 187 153 73 249 160

F Inflation compensation.

220 119 16 5 248 190 214 251

G Leftover soybean steak, for example [3 words].

132 22 182 136 110 41 186 238 38 237

20 196 21 85 117 59 82

H Plant growth hormone.

29 140 122 232 217 208 240 102 39 224 221

I Referring to a second melody.

201 34 53 257 189 131 135 146 228 246 25 181

J Judith, Ecclesiastes, Maccabees, ...

194 26 159 99 262 69 138 252 256

K \_\_\_\_\_ public.

2 233 96 133 139 243

L Does a word this long really need a clue?

141 58 33 88 179 52 95 115 148 255 227 183 167 210 120 64 89 42 211 218 46 114 203 156 260 36 105 216

M This.

37 62 108 97 14 143 55 263

N Friendliness.

178 9 151 236 170 101 49 1 157 197

O Duplicated liquor [2 words].

144 259 134 84 177 7 68 166 32

P What the wolf will do first.

56 192 107 247

Q Rootless.

158 184 61 200 103 90 155 173 241 91 78

R  $\{x \mid 0 < d(x,p) < r\}$ .

162 127 13 15 199 207 215 154 27 44 234 28 128

S Machine used to produce M.

94 77 229 174 145 254 81 198 126 261 66

T Ecstasy of a religious nature.

60 176 253 165 188 31 142 86 12

U Residences.

83 130 51 163 111

V What the program said when it had been in core too long [5 words].

212 74 76 222 219 70 116 137

W Conspicuous.

191 164 92 72 17 242 50

X Forest named for famous computer author [2 words].

80 169 4 106 125 65 185 195 204 113  
225 239 180 63 100 104 244 112 150 71 54

## Kiddie Korner

Hi Kids!

Last week **mathNEWS** lost our article so this week we present last issue's column intact along with this week's column.

It looks like we are attracting quite a following. There were 12 correct solutions to last week's progressions which were PRBKQK (pawn, rook, bishop, knight, queen and king) and SMTWRF (Sunday, Monday, ...).

Some people thought the first progression was PRBKQN (N for kNight), but you should have noticed that the pieces were listed in their position on the board.

Congratulations to Owen (Catfish) Leibman who sent his letter REGISTERED to prove he was first. A close race for second was won by Dave Stubbins who had his answer submitted 1 minute before djhelmus.

For those of you who do not have TSS accounts, we will draw at random 3 correct solutions from the **mathNEWS** mailbox, and publish your names.

We were pleased to see so many people build and fly our paper planes in the math lounge. For those of you who are interested, the design is called the *Klein-Fogel* wing, and it really is patented.

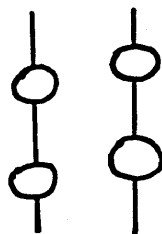
We received another design through TSS mail from tjthompson. This plane, although it does not fly as well, is interesting since it has a strange shape. Anyone interested in instructions for making this plane can ask us to forward it through TSS mail.

As for those of you who requested a water-bomb for our next origami, well, you will just have to wait. We do not condone violence!

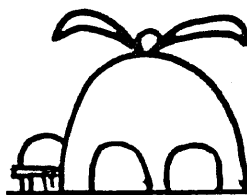
This week we have two progressions and two doodles for you. Sorry, no paper airplanes. Some people have complained that the progressions are too easy, so we made this week's more difficult. Here is the hard one for you smart-asses. What comes after VERWT? Hint: There is a mapping involved. And for you not-so-smart-asses, here is an easier one from your public school days. What follows MVEMJ?

We had a couple of progressions submitted last week by people who thought they could stump us. However, we were not fooled as we solved them within thirty minutes. In the future, if you can send us one that does stump us, we will print it in our column if we think it is fair. So do not start sending us your grandmother's maiden name or other silly things. Thank you to djhelmus and tjthompson for a nice try.

Our first doodles got a low response. This was partly due to ambiguous drawings. So this week our doodles will be accompanied by the solution. To make it difficult, the solution will be in the form of a cryptogram. Here they are:



POIU YTREPRQW LIU KRJO  
HL GOTOFDHOQ FHTO



PUL FUHC GUKOAZT PFEEI

Please let us know if you would like other features added to our column such as Mazes, Connect-the-Dots, etc. We are open to suggestions. Remember to send all solutions, suggestions, comments, compliments or insults to us by TSS mail via sceffer or rhtakashima. That's all for now.

Sam'n'Tak

Hi again Kids!

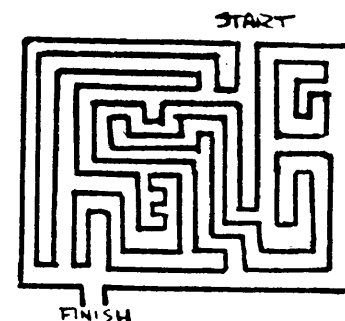
We haven't received any solutions from last week's column yet so we have some new features for this week. Actually, we got one solution from Donna Strangway, but she cheated since she had a preview of the progressions.

Before we start, we would like to apologize to all our loyal readers for our absence from last week's **mathNEWS**. However, it was not our fault. Our article was submitted! Someone must have misplaced it. Anyway, there is no use in crabbing about it.

Our new features are an amazing maze and a puzzling puzzle. We felt it was time to expand our repertoire of amusing diversions.

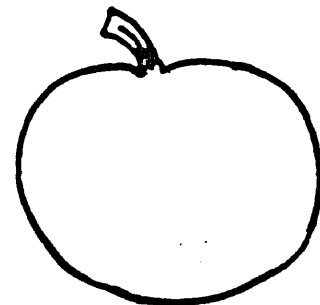
First the puzzle. This requires a great deal of mental concentration. In fact if you solve this, you could claim to be a mental giant. Either that or someone told you the answer! If that is the case, we are not impressed at all since the problem is not that hard after all. The problem is as follows: You are given six pennies and you are required to make two perpendicular rows. However, each row must contain *four* pennies. We will print the solution next week.

The maze is quite simple. In the diagram below you must go from the point marked "start" to the point marked "finish" without crossing any of the walls in the maze. We will make them harder in the future.



As you all know, last Saturday, October 30, was Hallowe'en, and there were a lot of Kiddies out trick-or-treating. In case any of you were wondering why it was on the thirtieth and not the thirty-first, the local politicians decided it would be too dark for us Kids on the thirty-first. Maybe they'll change Christmas to December 24 if it's too cold on the twenty-fifth.

Anyway, on Hallowe'en you're supposed to make a Jack-o-Lantern to scare the ghosts, goblins, witches and Kiddies away. Ours didn't work too well, so we're going to let you design a really scary one for next year. Just draw the most frightening face you can think of on the pumpkin below and drop it in the **mathNEWS** mailbox. We will print the best drawing in next week's column.



Because we have two columns in this issue, there should be lots to keep you busy. Also we have tried out some new ideas and we would like to hear what you think of them. Before we forget, Mathweek is coming up and we want to remind all you Kiddies who like playing Table Hockey to sign up for the JJBT-Mathsoc Tournament. It should be a lot of fun and there are real prizes to be won. If the winners are really lucky, we might even print their names in our column. Bye for now.

sam'n'tak





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.

## Overlapping Courses

Dear mathNEWS,

I read your article regarding material overlap in CS 342 and CS 450. However, that's not all. Some of the other course overlaps I have come across are:

□ *Linking and loading.* This was taught in what was then Math 132B, and again in Math 340A. As if that's not enough, the same material was taken up in CS 454 this term!

□ *Number representations.* (1's complement, 2's complement, etc.) This was taught in Math 340A and again, this term, in CS 342.

D. Dattani

## Inspired by the CSC?

Dear mathNEWS,

I was thinking of starting an Apathy Club. So I'm writing to seek your advice about how I should go about forming the club. I don't really mind if you don't feel you want to reply because I'm not really interested in getting one together myself; I'm just thinking about it.

Anyway I thought maybe mathNEWS could publish this letter and of those people who bother to read it, a few of them may want to join the club. Well, of course, just the act of actually wanting to join shows a little of that Gun-How [*sic*] spirit that I was hoping none of the club members would have. Oh well, I guess it doesn't matter. They can join if they want to. It's probably better to have a few people with a little interest, otherwise no one would show up at the monthly meetings. (By the way the first meeting is cancelled due to lack of interest. No date has been set for the second meeting.)

Anyway, I thought maybe someone interested just a little, or those who are interested but just don't feel like joining, could send his or her name in. I may collect these names together and then send

out membership cards if I get some made up. If they don't receive a card, they can just keep the copy of mathNEWS if the corresponding week that they wrote in as proof. Of course, this is not mandatory. Anyone can just say that he/she belongs to the Apathy Club if he/she wants to. Upon joining there will be no initiation or celebration of any kind marking the event, because I don't want to bother with that stuff.

So to the readers, if you would just write to me, I. M. Apathetic, c/o mathNEWS, and say in 10 words or less why you're so apathetic... Don't write more than this or you'll appear too enthusiastic and not be allowed to join. Of course they probably won't get read anyway. If you don't want to bother writing in, just turn to the person nearest you and say, "I am apathetic." (You can raise your right hand if you want, but it's not really necessary.) This will automatically make you a member. If it is a stranger that you swear to and he replies, "I don't care," he can join too.

Bye for now.

I. M. Apathetic  
(with the help of Les Werke)

P. S.: I might get a mascot and put a club song together. Possibly, highly unlikely mind you, but possible, I might get some T-shirts made up. But I doubt it.

## Strawbs

Dear \$ STEVE \$:

Writing in regard to your review of the new Strawbs album, *Deep Cuts*. This album actually happens to be better than that abysmal album *Nomadness*. John Hawkes did not play on that album either.

If you thought Dave Lambert could write, take a listen to "Little Sleepy" from *Nomadness*.

Also, before *Bursting at the Seams*, Dave Lambert was not a member and Dave Cousins did most of the writing (with Hudson and Ford doing most of the rest). Cousins has come up with what I consider to be the best Strawbs material ever (I have all 10 domestic albums, including *All Our Own Work* with Sandy Denny).

I would suggest you have a listen to the following songs: "Glimpse of Heaven", "The Hangman and the Papist", "In

Amongst the Roses", "Benedictus", "New World", "Queen of Dreams", "Tears and Pavan", "Lady Fuschia", and "Flying". It is only after these that Lambert makes his mark, starting with the *Hero and Heroine* album. This is a classic Strawbs album but was marred by Lambert's idiotic rantings in "It's Just Love". This song totally destroys the feeling of the whole album.

*Ghosts* was the next album and, disappointing at first, it quickly became, in my estimate, an excellent album. The title track, "The Life Auction", and "When Were Young" (with John Hawken) mark Cousins at his best. But once again Lambert destroys the album.

Then John Hawkes leaves to spend more time with his family. Lambert is now the member (apart from Cousins) who has been with the Strawbs the longest, and he makes his presence felt more than ever. The magnificent use of mellotron, moog, and other keyboards retreats into the background, replaced by, in your own words, "a screaming, whining guitar, which, to a great degree, doesn't fit the music." Despite this, check out "Golden Salamander."

This brings us to *Deep Cuts*. Not a good album, true, but if the last thing you heard was *Ghosts*, I don't blame you for your opinion, except for your remarks about Dave Lambert.

The best lineup the Strawbs ever put forth was the Cousins, Hooper, Wakeman (yes, that's right, "Rick the Quick" Wakeman), Hudson, and Ford. Substitute Blue Weaver for Rick Wakeman and that's the second-best lineup.

Incidentally, when Wakeman joined the Strawbs, his status became legendary as it was found he could match quaff for quaff (and then some) of beer with Dave Cousins.

The following is a list of albums that richly deserve listening to. You seem to have a fair collection, so try an earful of these: *Obscured by Clouds* (Pink Floyd), *Things to Come* (Seventh Wave), *Contamination* (RDM), *Time and Tide* (Greenslade), *Fragments of Light* (Sensations Fix), *Pinafore Days* (Stackridge), *3:47 EST* (Klaatu), *Below the Salt* (Steeleye Span), *Hello* (Status Quo).

If you missed Steeleye Span in Toronto on October 22, you missed the most incredible concert I have ever seen (and that includes Tull in October 1975, Pink Floyd at Ivor Wynne, and Genesis at Maple Leaf Gardens with Peter Gabriel in December 1974). When was the last time you danced a jig in the aisles with the lead (female) singer? Or skipped down College Street, or harmonized with people you'd never seen before on Yonge Street? This happened at and after the Steeleye Span concert. If you didn't see them this time, catch them when they come round again.

Oh, and by the way, I was arguing with the milk machine about Dave Lambert. How come you didn't answer? Do you know how hard it is to write a

...continued on page 10

