Orientation 1984

Orientation 1984 is now history. For those of you who participated in and survived the entire week-long party, my congrads. For those of you who didn't, my apparent sympathies(puppies!).

Proving to be a big winner for the Math Society, orientation this year sold over 200 more ties than last year. The drop-in centre was well executed, even the slightly long lines made it possible for the Big Brothers & Big Sisters to talk to more frosh. Later that evening, many returned for a bit of bopping to a live D.J. and a nip of hot chocolate. The next day there was a BBQ on Columbia field and although it wasn't exactly warm, the profs cooked up a culinary delight - hamburgers. Afterwards, 7 buses jammed with party-hardy people left for the Pub/Fun Crawl. (With the Pub Crawl bus 69 alias 21 containing the REAL partiers.) Similarly, the Magical Mystery Tour deserved a gr-r-reat round of applause. With nearly 70 cases of beer, 1250 hot dogs and a truck load of prizes being consumed, it appears everyone enjoyed them (and O h...Garth....). Hampered by bad weather, the Foot Rally still provided mental stimulation & frustration to those who participated. Even the Pub with the Engineers on friday night was fabulous with the Mathies showing them how it's done. And at the pub we did have our 40 feet long pink tie returned that had "mysteriously" disappeared from the side of the Math Building somewhere between 2:30 - 3:00 A.M. on Thursday.

Finally, Elora Gorge on Saturday allowed the big & little siblings a change to bake in the sun & recuperate before the nights' activities. (Don't worry, big T's feeling much better.) Of course what orientation would be complete without initiating the frosh to the nightly hot-spot of K-W, namely Sunnydale. Bopping between three different theme parties gave them a taste for life in Sunnydale. And Sunday—we slept and moaned, what else could we do.

Thanks to *everyone* on the Committee. Ya did a *stupendous* job and deserve a reward - it's in the planning guys - Orientation '84 revisited - so don't loose that shirt just yet. Details available next week.

Later,
Lisa Seabrooke
Director of Orientation '84

Counterpoint

A Frosh's-eye view

Throughout the confusion called "Orientation Week", MathSoc had a drop-in centre on the 3rd floor of the MC building. "Meet Your Family" would have been a good idea to get to know people, but many families didn't seem much on reunions. I arrived at the drop-in centre, lined up for a while, got my Frosh Kit, and met my Big Brother and Sister. They gave me details of the weeks activities, but as for the rest of my family, I have yet to meet them. Some of those who arrived late also didn't get a complete Frosh Kit; instead of Pink Ties (which ran out) they received pink rags! Even these rags had to be defended from invading Engineer corps who took every opportunity to capture pink items of clothing.

Despite the confidence of MathSoc in the security of The Pink Tie (the big one on the side of MC), the engineers, equipped with mountain-climbing gear, managed to sneak it away in the dark of the night. Engies demanded a ransom for TPT, including four cases of beer, several pizzas (without anchovies) and pink tie pins. However, at the following night's joint Math-Engineering pub, EngSoc agreed to a smaller ransom. Subsequently, Mathies struck back, capturing the EngSoc president, Gord Denny, offering him a long series of [free] drinks. Once he was in a suitable state of inebriation, he was dressed in pink, and "I love Math" was painted on his back. A ransom was demanded, but no engineer was willing to pay anything for him (would *you* help an Engineer? -ed.), so he was given up for free. After the pub, some clandestine forces spent excessive amounts of paint on the various walls and windows of the engineering buildings...

At Elora Gorge on Saturday, we unbelievably got the best weather of the week! It was sunny and warm, unlike the next day when the weather turned cold and drizzly (that was the Engineers' day!). On the way there, our buses passed the Engineers' Shine-a-Rama and we were able to expose the truth about the engineers to them through the bus windows. Alas, some of us weren't able to get the windows up in time for the returning shower (are you still soggy?). The cliffs were great if you could get up the courage to jump (I did (Wow! -ed.)) and the day was great to finish up that summer tan; so far it looks to be the last real summer day.

The Magical Mystery Tour proved popular, possibly because nobody knew what it was! As it turned out, there were 12 kegs of free beer and plenty of food in addition to various activities. These included the *n*-legged race, the (water-)balloon toss (which later mutated into a large water fight) and a mass football game, with around a hundred people on the field at once, running between the frisbee players. All in all, it was fun and there were grrreat prizes (*Hah! Michael Jackson posters!*). *Garth, shut the f__k up!*

Perhaps I'll be involved in an orientation when I become a big Mathie. Overall, the Orientation Committee did a good job, even if there were a few low points. Thanks!

Boone
1A Frosh

The Election
According to Dwarf

Well, it's finally over. Canada's two 'new' political leaders went head-to-head in a battle for the ballots that left the entire nation (except for the pollsters) in awe when the dust settled. Just what did we get out of the election? More than what people might immediately think.

For example, did anyone notice the three new party logos that were brought out for the campaign? This was the parties' way of keeping the unemployment rate of graphic artists down. But these logos were also functional. The Non-Democrats have partial outline of a maple leaf as the dominant feature of their new party logo. This symbolizes the breakdown of the country that will have occurred by the time they finally get to form the government. The Progressive Conservatives, after finally deciding that they were neither, dropped all but the upper-case letters and attached them to the end of a banner or flag flying in the wind. With all those Tories in Ottawa there will be enough wind to keep their logo's flag flying constantly for the next four or five years. The Liberal logo served a different purpose. The half of the maple leaf cut into the 'L' represented the eastern half of the country (where all but two of their seats came in 1980 and again in 1984). The word 'Turner' was placed on the left side of the logo to advertise to Westerners that Pierre Trudeau had gone. (It didn't work. At least with Pierre Trudeau as leader, Westerners knew what a Liberal was. With Mr. Turner as leader, the Liberals had nothing they could be identified with.)

Canadians have also been blessed with 209 new candidates for patronage appointments resulting from the election. (Mr. Mulroney and the Speaker of the House are ineligible for a few years.) Thankfully Trudeau, through his agent John Turner, filled just about everything that was available, so we'll have to wait for a few Liberal Senators to die off before we see just how many are promoted. Of course if Mr. Mulroney holds power for six years with all of his Members of Parliament, they will collect an MP's pension as well as their salary. (Then again, Mr. Mulroney could promote them just to force a by-election and give the Liberals a sporting chance at putting together a half-decent Opposition ...)

This election, too, brought something new to residents of Ontario and Quebec. They finally got to share the joy that British Columbians have had since the advent of television—knowing which party had won, and the size of the victory, before the tallying of their own votes had begun. Atlantic Canada had spoken, and by the time they did it was too late for the rest of Canada to disagree.

Of course this election also showed something to the world. It showed you could have a free and democratic election, with absolutely no violence, and still tell the nation who would win, and by how much, four weeks in advance. Watch for the 1985 quarters containing the words "In Polls We Trust".

Yes, this has been a good election for Canada. It has certainly given us amateur political pundits enough to comment on for the next four years. It's been nice rambling to you. See you at the polls in '88.

dwarf

Opinion

In this high-tech world, the role of the university and of the business community is changing—for the worse. To get a good job one almost certainly needs a university education. One reason is the increasing amount of research going on in the business community. This research is a necessity for businesses to remain competitive. I've nothing against the competing, the alternative is co-operation, merger, market domination, etc. and people in power almost always take advantage of it (owing to greed and the feeling of a need to be better than the next person). Mankind has some sort of natural need to compete which i think is related to the sex drive.

In any case, the competition in the business community drains good people from universities and results in less research on campuses, lower quality education and the need for universities to co-operate more with business.

Ideally, more people should go to the business community after high school. It would be the responsibility of business to educate these people and to manage the distribution, not the production, of technology. Universities will truly become centers for higher learning. The students would be fewer in number and would attend to learn, not to become more employable, and would have an opportunity to learn at a better pace than we see here at Waterloo (witness STAT 230/231, CS 140, MATH 130/134/234).

The enrollment in universities would match the ability of business to adequately spread the technology developed and hence there would be no "bottleneck" effect where universities become like the medieval church and information is the privilege of the few. No doubt technology would advance at a slower rate but technology seldom makes things better - it usually just makes things different. The tower of technology might not rise as fast but the base will spread faster and technology would actually makes things better.

All this requires a change to a more global way of thinking and a less competitive one. This makes sense to me because i believe we are all citizens of earth before we are citizens of our countries. But peoples allegiance to tradition is sadly strong.

dsch

Othello Tournament
for Programs

The CSC (Computer Science Club) is organizing an Othello Program Tournament this term. The tournament, which is open to all interested participants, will be held on the weekend of November 10-11, 1984. Prizes, whose truwe nature is yet to be discovered, will be offered.

The tournament will pit the Othello programs against each other, with the strongest game eventually winning. Now, what machine or language can you use? Well, here anything goes! As long as you can bring the machine to the MC building, or access it from a terminal here, it's OK by us. Use assembler, 'C', BASIC, or whatever turns you on. The playing time will be limited to 1/2 hour as per official Othello rules.

Contact the CSC for more information, or mail to csc@watmath or haapanen@watdcsu. Entry deadline will be in late October, but further information will be available later.

Proof of the Week

Show that for the Gauss-Seidel iteration $x^{(k+1)} = Mx + c$, the process will converge if the matrix norm $||M|| < 1$. Bonus marks will be awarded for adhering to the style of CS375 class notes.

Proof:

Observe that

$$E = mc^2 \qquad (fR(Einstein)$$

so

$$E = MC^2 \text{(case insensitivity of FORTRAN)}$$

and thus

$$\log E = MC^2$$

or

$$1 = \log M + 2\log C$$

Clearly

$$\log M = 1 - 2\log C$$

giving

$$M = e^{1 - 2\log C}$$

and hence

$$M = \frac{e}{C^2}\text{(circularity of argument)}$$

whence

$$||M|| \le ||\frac{e}{C^2}||$$

but

$$C \approx 186000$$

so

$$||M|| \le n\left(\frac{e}{186000^2}\right)$$

which definitely

$$<1$$

So any Einsteinian Gauss-Seidel iteration matrix will converge. $\square$

Car Rally

Mathsoc is pleased to announce its 1st annual Car Rally on Saturday, September 29th at 12 noon. For those unenlightened folks out there a car rally is when a bunch of people get together and drive around the city as fast as they can (but within the speed limit of course) following silly instructions. It's easy to learn, but tough to master so anyone can enter. There's prizes, a trophy for the winner (the 1st annual mathSoc Car Rally trophy), and a 50 cent barbeque afterword. So come on out and have fun.

Sign up in mathSoc by 3:00 pm, Friday 28th.

LookAhead

A glance at upcoming events

Math Events
Sept. 22 Cheap Tour
Sept. 29 MathSoc Car Rally
Fed Flicks
Fed Flix are held on Fri., Sat. and Sun.
8 pm. AL116 Cost: $1 feds, $2 others.
Sept. 21-23 *Footloose*
Sept. 28-30 *Terms of Endearment*
Cinema Gratis
Starts in the CC at 9:30 pm.
Get there early and get a good seat!
Sept. 26 *Madame X*
Oct. 3 *Rich And Famous*
mathNEWS dates
Sept. 23: **mathNEWS** *articles deadline*
Sept. 24: **mathNEWS** *production night, MC3038*
Sept. 28: Next **mathNEWS** *available*
UW Arts Centre
Call Humanities Theatre Box Office at
885-4280 for more info
Sept. 25 *La Traviata* (film)
Sept. 29 *Royal Canadian Air Farce*
DCS Courses
Free! One to three one-hour lectures;
contact DCS to register.
Oct. 9,10,12 CMS Part II
Sept. 24,26,27 Introduction to GML
Oct. 1,2,4 Introduction to APL
Oct. 1,3,5 Introductory Unix
For Co-ops Only
Monday, Sept. 24 Resumes are due!
Sept. 28 Want Ads come out!
Oct. 1 Job Applications due.
Oct. 2 Late postings begin.
Oct. 22 Interviews Start!

Puzzle Corner

From: bek@duke.UUCP (Barrett E. Koster)

Person A thinks of two integers between (but not including) 1 and 100. A hands the sum of the two numbers to a person we shall call S, and the Product to a person we shall call P. The following conversation takes place:

S: I don't know what the numbers are.
P: I don't know what the numbers are, either.
S: I knew you didn't know.
P: Oh, well, in that case, I DO know what they are.
S: In that case, so do I.

The question is, what were the two numbers?

Barry Koster duke!bek

movieNEWS

This column is devoted to movies and their audience. I hope to make this a regular feature of mathNEWS, but that will depend upon you and your response.

The primary purpose of this column will be to list the films showing on campus in the upcoming weeks and to recommend and/or comment upon them.

If possible i will even review a few films that i get a chance to see. I will certainly welcome anyone's comments on any film shown or showing on campus and print them where possible. In this week's column i've include a few from Scooter. To them i can only say that if your entire Casablanca experience can be put to numbers then you are missing part of the experience. Rating movies on a scale from one to ten is as bad as rating women on such a scale. But Scooter was responsible for the frosh issue of mathNEWS so i don't think i need to say more.

In addition to this i am considering trivia contest(s). More than anything else in this column, the trivia contests depend upon your response (see below).

To wrap up this introduction, i will say that given the opportunity, i will most likely ramble about films in general - their history, individual achievements, tidbits, etc.

Trivia Contest Details (part one):

At this point all i will say is that this contest will be very player dependent. As proof of this, nothing more will be said about it unless enough people submit the following:
(i) A list of your 10 favorite movies and
(ii) A list of your 5 favorite movie personalities (i.e. director, actor, actress ...).
Even if you are not going to play, i'd appreciate the input. (All submissions should be placed in the mathNEWS box on the third floor.)

dsch

Red Dawn

This movie is set on the story that NATO has collapsed and the Soviets, aided by a Marxist Central America, invades the United States. It had several "They blowed up real good!" scenes, but the idea that it was a portrayal of American independence of spirit was just to overdrawn. It plays all too fully in many points to the arguments of the Reagan administration, and seems to be more a form of propaganda than *If You Love This Planet* could ever be viewed as being. It may prove to help the Republicans in this election year. The acting was good, as were the technical aspects, earning both an 8.5 rating, but the story was just too much like war propaganda, and I only give it 5.5, for a total score of 7.45 out of ten.

Tightrope

This was a good movie, but it wasn't *Magnum Force*. The thing you must keep in mind is that it wasn't meant to be. The story of a detective who is forced (and in a way, driven) to track down a rapist/killer of the very sort of women that he spends his nights with, it is much more a story of a man forced to realise a development of a high degree of depravity in his life by encountering one not so different from him who has slipped off that fine tightrope. If I had directed it, I would have shortened the movie a bit by killing off one

less prostitute, as it did start to drag a bit when they were the victims. Acting is worth a nine, story and technical each earning 7.5, for a score of 8, a definite *should see* if you haven't yet.

The Woman in Red

This is one of Gene Wilder's better movies, on par with *Young Frankenstien* and *Blazing Saddles*. Based on a French movie entitled *Pardon Mon Affair*, it uses a set for the offices identitcal to those in it's predecessor, much to my surprise. The general story tends to be somewhat predictable, but then it goes into sudden swings of sheer lunacy and folly. I found it quite well done (especially the scene with the gun), giving acting 8, story 8, and technical 8 for a score of 8 as well. Surprisingly, it is not noticeably sexist, and the only drawback is that Kelly LeBrock is married in real life to the movie's director.

This is actually quite a sleeper for the summer. The best movie that I have had a chance to see is Dreamscape. It combines adventure, science, humour, and even romance in a well-told story that is not quite as farfetched as it may seem. The hero is brought to be able to *"link"* with someone dreaming, so that he can share and take part in the dream of the person to which he is linked. Part of the idea of the project is to cure chronic nightmares, but a government representative from an organization of which even the CIA is afraid sees other uses for it, such as assassination, and tries to use it on the President when he fears the President will sign a disarmnament treaty the representative doesn't support. It wasn't so much the story as it was the way the story was built and handled that kept your mind interested, alert, and awake. When I left, though, I distinctly recall worrying that it might have given me nightmares...

I give this movie a nine for technical, which it earned in the portrayal of the dreams alone, and 8 for both story and acting to give 8.3 as a total score, which is the same score I came up with for *Gandhi* and only 0.1 behind *Terms of Endearment*, my number two all-time favorite. Number one, with 9.3, is none other than *Casablanca*.

Marcel Kahnt

New Term Resolutions

Well, another term has begun. Now is the time to put into practice all those promises you made while cramming for last terms exams.

1. I resolve to review my lecture notes every night.
2. I resolve to go to class (more often!??!).
3. I resolve to do the assigned readings before class.
4. I resolve to start assignments 3 days before they're due.
5. I resolve to take my artsie electives seriously (maybe to open the texts before exam week).
6. I resolve not to socialize in the library.
7. I resolve to start studying weeks early for exams.
8. I resolve not to forget why I'm here in the first place.
9. I resolve to keep one resolution per term (this one, for instance).

Gridword

mathNEWS's ever-popular Gridword returns in this issue. Submit your correct solutions to the puzzle via the mysterious black box on the third floor. Prizes will be announced next issue.
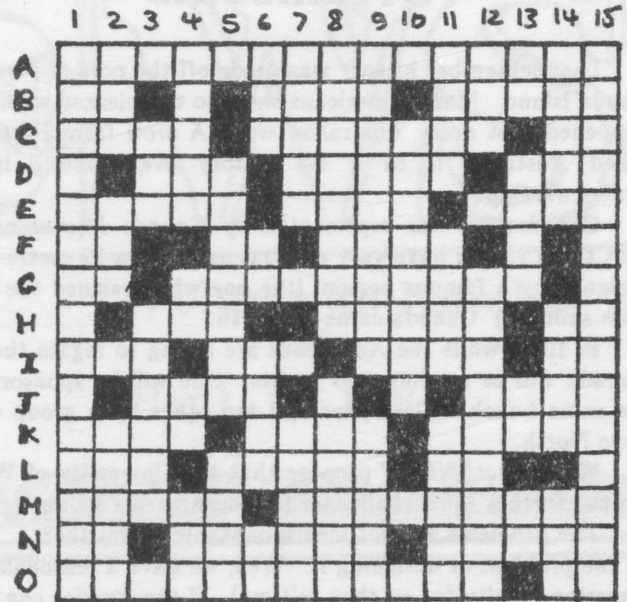
Clues

Down

1a. deprived
2a. creature crushes its prey
2e. acetylsalicylic acid
2k. boredom
3c. tennis essential, less than gross
4a. sort of
4g. load and __
4j. Not Turner
4m. the fans hate him
5d. many-sided planar figure
5l. chimney passage
6a. Bell Labs parent
6f. morning
6i. power for rejection of action
6n. balances with debit
7a. upper leg
7k. astronomer Tycho
8a. credit due to illness
8j. ringed disk
9a. practice
9k. set again
10c. government levies
11a. aid and ____
11f. Porky & three
11k. Rangoon state
12a. sister
12g. feline yell
13a. not out
13d. swap back
13j. circled letter
13m. Linda Lammert
14a. Iroquois trophy
14h. stylish
14m. suffix means 'belonging to'
15a. Russian fire drink

Across

a1. omnipresent doctrine
b1. little number
b6. Phase wedding word
b11. Honeywell makers
c1. Judge Porter
c6. opposite to loosen
c14. Arts Library
d3. especially short
d7. Gonzo the ____
d13. teachers's note to janitor
e1. relationship between two magnitudes
e7. mischievous deception
e12. good attention
f1. postscript
f5. Olympics site
f8. back part
g1. Schaeffer's god
g4. tumbling
h3. wet spongy terrain
h8. coniferous forest
h14. Prof. Lim
i1. half volume
i5. eggses
i9. Shangri-La horizon
i14. Santa's fave word
j3. queen of nine days
j12. long poem
k1. from ashes to eggs, loaned
k6. hyphenated ski lift
k11. spalled of EL
l1. mate to begin
l5. Applied Math head
l11. here!
m1. twist or contort
m7. down under
n1. prefix means 'good'
n4. CC tourney game
n11. prefix means 'many'
o1. partial equations
o14. __ Salvador

Cheap Trip

For all you cheapies out there, **mathSOC** presents a tour of the various and sundry factory outlets in the K-W area. When is this? (You ask ...) That's the bad news: the buses leave MC at 7:30 am on Saturday, Sept. 22nd (ie. tomorrow). The good news is that coffee is available on the 3rd floor at 7 am.

Stops include Forsyth's (shirt factory), Arrow, Greb Shoes, Tiger Brand (T-shirts, etc.), and the Sweater Factory Outlet. A modest bus fare of $2 for Mathies and $3 for aliens will be charged.

ORIENTATION PICS

Photographs taken at Orientation are now available at the MathSoc office in MC3038.

$$\int \sec^3\theta \, d\theta = ?$$

Mastheads

Well, here it is, the first of the new term, mathNEWS! Thanks to all, specifically: Boone, only a fresh but you get a front page article; Kevin, writing, typing and being funny's Jane, without whom nothing would be different; Rochi for Resolutions - yes you're famous now; Tom Ivey, knowing everything and doing lots; John, Putnamming for Cary. If you write anything for mathNEWS, W. , generalities; Tom, thank you all. just drop it in Alfred and i, editors, our hex outside the smoking lounge. Articles from Brett, Dwarf, Lisa and Scooter were appreciated as is anything We get together every Monday at 7 in MC3038 submitted by anyone. to put this thing together. Drop in and help sometime! - Alfred

Dreamboats

Last september history was made off the port of Newport, Rhode Island. Many Americans were no too pleased with what happened, but every Australian was. A crew from Perth had sailed *Australia II* to a 4-3 victory over *Liberty* in the America's Cup.

Canada, us, was represented by *Canada I* (ever noticed that these yachts have very original names?), a 12 metre yacht designed by a famous person. (the one who designed the Laser class sailboat) Canada came in fourth.

In 1987, while the Americans are trying to regain the cup, Canada will be sending two yachts. One will be sponsored by the same bunch as last year and the other by a group called True North.

We at *mathNEWS* propose that the University of Waterloo put forth a third challenger for the America's Cup.

The problems are not insurmountable. First there is the problem of designing it. Well, we have a reasonable engineering faculty (or so they tell me). If the Aussies can come up with a winged keel surely they can come up with something equally staggering. This would make an interesting fourth-year project for some people.

The next problem is money. Well, what do we have the WatFund for?

Third, finding a place to build a yacht. Columbia lake will not do (it isn't big enough and it freezes in the winter). The ideal place is California but for obvious reasons it is out of the question. Anything on the Atlantic is too far away. The alternative is B.C. There are enough place to build a yacht in secrecy. Also we could get the University of Victoria Co-op Engineers to build it cheaply (assuming they get their program started by then).

The fourth problem is one of crew. Well don't look at me! I can't sail. Out of all these people there must be someone who can sail. Anyway, it isn't my responsibility. We could always hold auditions like FASS does.

Now, by building the yacht on the Pacific coast we don't have to worry about training or testing. And I say that they could sail it to Perth; However I have been informed that it would have to fly. Oh well, back to the WatFund.

I see that there are still some doubting thomases out there. Well, if the University of Alberta can hold the Canadian Concrete Toboggan Championships for engineers and Shell Canada sponsor a Fuel-a-thon, surely a minor task like this could be undertaken. Just think of the prestige that it would bring to this school. Just think of the work-term report you could write.

We are agreed, then. Waterloo can mount an America's Cup challenge.

The next problem is finding a name for our fair University's brand-new 12 metre yacht. Watyacht has a nice ring to it, as does Whimsy (or, in honour of our ex-Fed Pres, Wimsie). Of course, we could glibly call it Waterloo One, but I like the idea of naming it after our football team: Waterloo Zero.

Perhaps this is all a little too far-fetched [just a little - typist]. The thought of a Waterloo-designed, -funded, -built, -sailed, and -named 12 off the coast of Australia in three years

Cary Timar Look-Unlike Contest

Rules: Send a polaroid picture of yourself (or of someone who looks like you) to mathNEWS. You must enclose a letter of 50 words or less explaining why you deserve to win. If you do not own a camera or don't think that you have a prayer, briefly describe yourself or get a friend to draw your picture (or someone else's).

Well, those are the rules. They are really quite simple. Here are some features that you should watch out for:

Hair: Not curly, very short or very long; and comb it.

Beard: Having a beard is an asset (especially if you are female).

Legs: Not having legs is also an advantage. The next best thing is having long legs.

Face: This paper does not have a camera; however the more human your appearance, the better your chance.

Clothes: Cary Timar wears clothes. Not wearing clothes is a very big advantage especially if you are female (depending upon the judge).

Now, here is a list of possible contestants:

Cary Timar: Not a chance.

Pierre Trudeau: A good contestant. He's french and his hair is thinning. Unfortunately, he wears glasses and has a big nose.

Abe Lincoln: Another good contestant. His hair is black and he is tall. Unfortunately he is dead.

Superman: Very good. He has muscles and can fly; unfortunately he works for a newspaper and is a fictional character just like Cary Timar.

A Cucumber: This cuts too close to the bone for comfort. Besides it has to prove that it wrote it's own letter.

Tom Allison: Good, good, but once again Tom is fictional.

Playboy Playmate: I can't say enough about this contestant: Great, Super, Excellent. She may not win, but this is type of contestant we want to see.

That's all there is to the contest. Enter as often as you wish and good luck!

I must admit that women will have an unfair advantage in this contest as Cary Timar is a man (after a manner of speaking). However, if only two people enter the contest you are sure to win a prize. We cannot return entries and we reserve the right to pass the entries around the office and laugh at them.

is nothing short of laughable. It is possible [really? - typ.] but laughable. Now the bathtub race at Nanaimo is another story. Anyone interested in a Waterloo connection at that one?

dwarf