MATHNEWS

Special Wine & Cheese

This is the weve weres all term.

Volume 38 Number 5

& Mouse Issue

Mouseday, July 5 1985



LookAhead

A glance at upcoming events

Math Events
July 6 MathSoc Wine & Cheese
July 13 Faculty-Student Picnic
July 18 Math-Eng Pub
July 25 End-of-Term Pub (already!)
Cinema Gratis
Starts 9:30 in the CC and it's free
July 10 Sweater, Dresser
July 17 Drag, Easy Rider
July 24 St. Louis Blues, Last Waltz
Fed Flix
Shown in PHY 145 at 8 pm.
Feds pay \$1, others \$2
July 5,6 All The Right Moves
July 12,13 Educating Rita
July 19,20 The Natural
mathNEWS Important Dates
July 21 mathNEWS Articles Deadline
July 22 Production Night
July 26 next mathNEWS hits the streets

More Fun in the SAC

Reports from this quarter have been lacking lately, due to that unfortunate time of the term known as midterms. So, much has been discussed lately by the SAC:

1) Combining all handouts into one booklet: Work Report Guidelines, Learning Objectives (this way you'll save the second because of the first), Interviews, Resumes, Everything You Wanted To Know ..., Regulations and Procedures, etc. Improvements to each booklet are also being made.

2) Reviewing and improving employer evaluation forms - any suggestions?

3) Placements Statistics: 97.2% for the present term, way more jobs than students left to place for the next term.

4) Review of orientation sessions

5) Switching undergrad and grad postings in Needles Hall to allow for more room; lack of colour-coding on late postings (this was done to save time and allow for more overlap in applications); with the present amount of overlap, especially in computer-related jobs, the two co-op sections (primarily Math and Engineering) may be done together next summer.





Theorem Of The Week

 $i^2 = \sqrt{-1}\sqrt{-1} = \sqrt{-1}\sqrt{\frac{1}{-1}} = \frac{\sqrt{-1}}{\sqrt{-1}} = 1$

Therefore i = 1 or -1. Since real things can be represented by real numbers and all imaginary things can be represented by imaginary numbers, we can conclude that everything has the same level of existence. In addition, it can be noted that despite Descarte's assertion, being able to think is hardly a prerequisite for existence (which is a good thing for the artsies and engineers.)

> Name And Address Withheld To Protect The Guilty

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-BP

On "Laptops"

This fall another "experiment in computing" is starting at UW. Some thirty students, scattered across various faculties and courses of study, will be using small, lightweight, portable computers now being referred to as "laptops." The computers will be prototypes for a machine that, ideally, will be unencumbering yet powerful enough for students to do useful work - doing an assignment, writing an essay, taking notes - just about anywhere.

According to Dr. Don Cowan of the Computer Systems Group, UW is following a trend in the way computers are used and can be used. Although this university is a leader in bring students and computers together, "we still don't make as much use of them in courses as we could." Part of the problem is the inconvenience of having to go to a central location and sit in a terminal room to use a computer. The aim of the laptop project is, instead, to bring the mountain to Mahomed — to make computing as convenient as possible.

[Historical Note: The laptop idea is similar in spirit to the idea of the "Dynabook," formulated by Alan Kay at Xerox PARC in the early '70s. The Dynabook concept foreshadowed today's personal computers. It was to be a portable, personal machine, an electronic notebook/workshop/library that could be made arbitrarily small and have an arbitrarily large amount of computing power.]

In the fall the student "guinea pigs" will be able to print files and transfer files to and from their machines by physically connecting to the campus computer network. While the details of this are still being worked out, students will likely "plug in" at a central location, in the Math building, and then go off and do their work where they please.

The identity of the machine's manufacturer is not disclosed at present, and neither are many physical details of the machines themselves (although a major announcement will be made in "a few weeks" from now). According to Cowan, the ideal laptop computer will have half a megabyte of memory, have a built-in display and keyboard, weigh between four and ten pounds, and b e about the size of a calculus textbook. The processor will be of the latest generation, possibly but not necessarily 32-bit, possibly made by Motorola or Intel. Ideally, students would be able to plug in to the network at several stations on campus; eventually, a wireless radio link may be possible.

While the pilot project is getting underway this fall, UW has a long-term commitment to the laptops. It plans to expand the project to 300 students in the winter of 1986. Over the next two to three years it expects many more students will be using them.

At some institutions — at Queen's, McMaster and at many engineering schools in the US — students are obliged to buy their own computers. Cowan states that, at this time, the university has no intention of requiring that students purchase the laptops. However, Cowan admits that in a few years not having one of these machines may be like carrying log tables around with you when all your classmates are using pocket calculators. He added that, although there is no way to help students purchase their own computers now, "imaginative financial arrangements" will probably be available when the machines are.

Waterloo - "Image: Yuppie"

Those of you who read the Toronto Star this past Saturday know what I'm talking about. My first thought after reading "Whiz Kids at computers without any time for fun" (the title gives you an idea of the rest of the article) was that reporter Jack Cahill was *nasty*. Of course, I wasn't impressed with the first thing that caught my eye: "Students dance in *Con*federation Hall ... a rare happening at Waterloo University ..." And after having read a glowing report on Trent University (the first in the series on universities), I did not expect to read that Waterloo is "classless." (But who wants to be elitist or 'country club?')

For the record, I have long considered Waterloo to be a "Yuppie" university. And it has been pointed out before that this university is overcrowded, business-like and tough. On the last point, I recently read an article by scientist David Suzuki (also in the Toronto Star) where he claimed that no Canadian university a) can afford to choose students on the basis of marks, and b) can compare to American universities. Waterloo is an exception to both statements. Top universities have to be tough to produce results.

The Star article seems to say that Waterloo students have a very narrow view of the world. However, university is what you make it (excuse me for sounding so deep), and it doesn't have to be all computers. If you really wanted training only with computers, you would be at a community college instead (where you would be out in the working world sooner and at less expense). On the other hand, if you wanted a liberal education, you wouldn't enrol in Math at Waterloo (and why ask George Elliot Clarke about this, since he resigned because noone agrees with him anyway?). If you want to learn about the world in general, what better way is there than moving every four months?

There is spirit here and time for fun; maybe there isn't full participation because there is so little time. Sports teams don't have the same seasons as other universities, so they're sometimes not up to par. But maybe the author should have seen the U of T Watpub one Wednesday last winter, to observe the spirit of Waterloo students and the lack of U of T students? A few friends may be lost because of this system, but many more are made, and most move together from term to term.

While there are many valid points in the Star article, the overall impression given is not a nice one. Several classmates agree with me, although one student I talked to agrees wholeheartedly with the article. The Toronto Star seems to be saying, "You must be Mad, or you wouldn't have come here."



Random Number Testing

10 INPUT "TYPE A RANDOM NUMBER {R ∈ [0,1)}";R
20 IF R=RND(1) THEN PRINT "YES! THAT IS A RANDOM NUMBER":END

30 PRINT "SORRY, TRY AGAIN" 40 GOTO 10

Tom Ivey

The Caliph of Caliphornia

When we last left our illustrious heroes, Tom and Alfred were stuck in a BOG, the Shirriff was nearby, but absolutely nothing had happened to him, dan and Georg were in an art exhibition in Los Angeles, Paul was in either Victory or Los Angeles, Centre of Gravity was recuperating in San Francisco, Dr. Ernie and John were rushing from Berkeley to Mount St. Helen's, Bonita and Cary were taking an all-expenses-paid trip for two to Mount St. Helen's, and derfy had been hijacked to Beirut (and all this in one sentence!).

dan, recovering from the dread disease Mono Lida, leapt after a gorgeous girl he spotted in a painting by Chagall. Georg, fearing what might happen this time, rushed after him. While they passed behind the scenes, they were spotted by one of the Caliph's henchmen, strategically positioned in Rembrandt's Night Watch. This minion alerted his captain, who ordered the entire company after the two **mathNEWS** fugitives.

In many of the paintings they passed through in this region, people commented in shock about the strange figure of Georg and his monochrome hair. These denizens of the painted world were yet more surprised at the sudden appearance of the Caliph's henchmen and their captain.

But the captain was none other than the gregarious Gregggg, a mathNEWS worker on his work term in an undercover co-op job [an undercover co-op job — sure! Working at Church and Jarvis, I suppose. That's co-opulative education for you! — typ.] as a Henchman Leader for Caliph Computers Inc. of Caliph Alto, Caliphornia [won't that look good on his resumé! — typ.]. That's right, boys and girls! Greggg is really a good guy!

Meanwhile, Tom got sucked into the BOG, and Alfred, trying to save him, was pulled in after him. Passing through it with much stench and choking and suffocation, at length they emerged in a battered car travelling in the middle of a lengthy parade in Paris. Paris, Ontario, California, that is.

After collecting his silver medal at the Ex-acto[®] Knife Throwing Competition in Los Angeles and Victory, California, Paul collected his luggage with a sniffle and a sneeze (for he had been caught in a draft without a draught) and headed off to San Francisco to find Centre of Gravity. Camille, in the interim, had split, but luckily his Centre of Gravity had maintained its original trajectory, when out of the blue a mad flasher by the name of Chuckles revealed much to Centre that would later prove useful. Paul happened upon Centre in this moment of shock, and threatened Chuckles with an Ex-acto[®] knife should he not remain covered. Paul and Centre of Gravity decided to continue to Mount St. Helen's, and Chuckles, chuckling perversely, followed close behind them.

In frigid Beirut, derfy was forced off the 747 in -40° weather, and into the ramshackle palace where Blue Berry ruled. At that very moment, the commander's daughter, a true derfyiette, entered the dungeons. Spotting derfy, she fell head over heels in love at first sight. After he had picked her up



with an odd feeling of déjà vue, she proposed marriage.

"If you accept, you'll become a prince, and can do whatever you like. If you don't, I'll make Daddy behead you!"

"But I'm already married!" protested derfy, but nonetheless the wedding took place twenty minutes later. After the marriage was consomméd, derfy remembered that he must needs rush to the aid of his friends.

"But we've only been married 39 minutes!"

"And eight seconds. I know", said derfy, checking his timer, "but I must leave now. I shall return!"

And leaping into a commandeered Air India flight, he flew off to rejoin his companions. But what should happen to him now but a friend of his named Jack, who he had met at the Village Semi-Formal, stepped aboard the plane.

"Hi, Jack!"

"That's a feeble pun! This plane is going to Bermuda!"

But, as the jet passed through the Bermuda Triangle, a UFO pulled up alongside of it, and a host of little green men (not UW janitors!) forced the plane to make an emergency landing on Mars!

Finding that they were being pursued, Georg seized dan and charged back into the exhibition through a Monet. A wealthy connoisseuse of art, the famed Alison, studying the exhibition, promptly bought dan, and took him home with her. Although dan was perfectly happy about this, Georg accompanied the two of them on their stroll, until the Caliph's henchmen were spotted in hot pursuit. The only solution seemed to be at Mount St. Helen's, so Alison, dan, and Georg set off for that place, with the henchmen henching close behind them.

However, Bonita and Cary, on their cruise, landed on the rim of the crater of Mount St. Helen's and got into their chauffeur-driven limo just in time to see Tom and Alfred drive over the wrong bridge in Paris, and wind up in the car beside theirs.

At this point, Dr. Ernie and the Mad Irishman reached the BOG where Tom and Alfred had but recently disappeared. There they found the Shirriff.

"Good day, good Shirriff."

"Holy Void, Ernie! Why doesn't he answer?"

"Something terrible has happened to him!"

"But what is he suffering from, doctor?"

"From Absolutely Nothing!"

"Oh no!"

But it was true. The trusty Shirriff was at the mercy of Absolutely Nothing, and it seemed as if Absolutely Nothing could save him! Was it possible? Was it dangerous? Was Absolutely Nothing in the pay of the Caliph! I'll try to figure out the answers to all these questions and more, by the next installment. Tune in on our final issue of the term for ... the car chase scene!

How I Lived The Story Of Quod

It was a month ago when I began to worry. That was when Jack, an old friend who I hadn't seen in a couple of years, wrote to say he'd be staying in Waterloo this summer. Oh gee, that's swell, I thought, hopping about on one foot, and bouncing in slow motion off the fake wood panelling encompassing my room. But even as I succeeded in patting my head and rubbing my stomach simultaneously the thought began to form. It was an infinitessimal spark such as that which inspired Newton's Calculus, or Einstein's relativity, and which in this case inspired me to consider committing slow suicide by reattending all the CS-140 lectures.

Before continuing, you should know about Jack and about myself. Jack is the sort of guy you look at and say, "I bet that guy's name is Jack". I like to consider myself insane, and hence able to face anything the world has to throw at me.

This worked fine up until a month ago. I could already feel that swirling sucking vortex of despair, spinning me down into a plethoric vertigo. Is it puberty? Is it a 49% final? Is it the Fed Hall? No, worse than all of these, it was the question of doom (Which here-after I shall refer to as **QUOD** for reasons I'm not quite sure of yet).

Me and QUOD are worst of enemies. I figure if QUOD was incarnated into a man, he'd be called a prick. (For the equal-opportunists out there, a female QUOD would be a mud-sucking, nail-scratching bitch. I'd hate anyone to think of me as a male-chauvinist pig.) QUOD would be the sort of person who would insist on bringing his entire tape collection to your party and having them all played, despite the fact that his tape collection consisted of every Beach Boys album ever made and one tape of the Partridge Family's greatest hits which his friends gave to him one day in a valiant but futile attempt to get him to play anything other than the Beach Boys.

The most infuriating feature of **QUOD** is how he never pops up, he always creeps in, the way mold creeps in to village food. I saw **QUOD** coming a month away, and I swear he had something to do with how that month somehow compressed itself into one hour.

I seemed like that long ago I had put the letter down, as I now meandered along the campus pathways thinking, as I looked at the smiling, hunch-backed figure lumbering toward me, "I bet that guy's name is ..."

"Hey, Fozz, how in the name of Jello Pudding is it going?"

"Jack! Well bust my buttons, how ya doin'? Your hump is looking a lot better ... "

And so the conversation began, and with it came QUOD. I felt him put his hand on my shoulder as if to say, "this is it, kiddo". Defensively, I gave QUOD a swift reverse kick to where the sun never shines, and hustled Jack away to Fed Hall.

Jack had never been to Waterloo before so I figured it would be best to throw him in the deep end.

"Chicken wings, please. Hot, really hot, we're talking Hiroshima here."

"You'll have to order the food from the food bar", replied the waiter smugly as if he really wanted to say - "Listen, you flat-headed plamph. Don't you realize that since it's between 12:00 and 2:00 on a Tuesday of a post-leap-year, and that there was an eclipse two years ago today, and because the manager's corn hurts, that you have to get the food from the food bar."

I asked the waiters name to which he replied Dick. That figured.

So half an hour later we got our food and the waiter returned with our drinks exclaiming, "Here are your O.J.'s", as if they were triples of 100% proof vodka.

Ten chicken wings, forty napkins, and five hundred glasses of water later **QUOD** caught up. It was inevitable now. I saw Jack wording that dreadful question in slow motion. I saw his tongue roll almost appeasingly inside his mouth. His lips stretched into unimaginably horrific, and inhuman forms to expound upon me the full impact of **QUOD**. It was like having smoked ten joints followed by watching "Plan 9 from Outer Space". The mental anguish was excrutiating as he crescendo'd to an orgasmic climax of apocalyptic proportions.

"So Fozz, uh, what's there to do in Waterloo anyway?"

The agony was incomparable. I racked my mind for any answer, but only the terror of the dreaded three B's appeared -Bars, Bowling, and Bingo. With the present Fed Hall experience, the first would destroy him, and the latter two would utterly decimate him. Feebly, I tried to change the topic.

"So, Jack, how about them Blue Jays?!"

"Hey, I haven't seen a Jay game in ages. When's the next one."

"They're playing tonight in Toronto."

"Bonus bucks, lets go!"

"Zany, let's do it!", I said, finally convinced that someone out there might like me after all.

And so did I narrowly escape this unimaginable horror. Everyone thinks it won't happen to them, but it does. So be prepared, **QUOD** is coming, and baseball season ends in October.

Fozz Sutherland

P.S. The resemblance of any of the aforementioned characters to any person, living or dead, is purely coincidental with the exception of Jack, whom I'm sure everyone would recognize, hump or no hump.

Burnham Burns 'Em

Math Medium Rare

It has been quite a few years since this reporter has experienced a party quite like the Applied Math barbecue held two weeks ago. There was fun and frolics as advertised and more. The co-ordinators of this event, Alison Burnham and Bruce Sutherland, put forth a valiant effort to keep the voracious and seemingly under-nourished masses fed without sacrificing too many hamburgers and hot dogs to the Barbecue Gods. No expense was spared by the applied math department to fund this event that is designed to bring faculty and students together in a non-academic atmosphere each term. In particular, everyone at the picnic helped the chairman of the department, Bruno Forte, to celebrate his twenty-seventh birthday for the thirtyfirst time.

With the miraculous lack of rain, the department thinks it's on a roll and will probably have another barbecue next term. It would be difficult but who knows, maybe they could do even better then. We'll have to wait and see.

More Notes On My Life

Work Term Living Arrangments

Last work term I lived with a person who is an example of how low a lower lifeform can get. This is not only my opinion, but my friend's opinion and her boyfriends' wives' opinions.

I only realized this after living with her for 3% months – a strictly platonic arrangement (how come nobody will believe me when I say that?), I can assure you. (No, that was no factor in the forming of this opinion of her, and if you knew her you would understand why I say that with a look of relief on my face).

Some of the factors were:

i) arriving and getting hassled because the hotel security thought we (me and my brother (who drove me to sunny Ottawa)) were hoodlums.

ii) finding out that the reason I was picked over all the others who responded to her rent-out ad was that I was the least weird. (I should have clued in right then that something was amiss with this girl - I, even if I say so myself, am pretty weird, and if all she could attract was people who made me look good by comparison, has she got a problem!)

iii) meeting her friends. Why would that be a factor? Picture this. We are at a bar and I have just met Judy's friend. She is waiting for her boyfriend. She has had nothing to drink and so is not drunk. While she waits she goes into a very graphic, sexual description of what she did to him the first (and only!) time he stood her up. Now, as I had just met her, I formed a very good first impression. (Not only was she sick and depraved, but she was down right mean.) And this was Judy's best friend!

iv) seeing the places she frequented during her leisure activities – upper class bars. By "upper class" I mean that over half the men that go to these bars are very well off, and married. Naturally their wives are nowhere in sight. (This was something that Judy told me. How she found out ...) Also, 10%-25% of the women were prostitutes, depending on how "upper" the male patrons of the bar were. (This is another thing that Judy told me, not something that I discovered by myself!) From her description, I gathered the hookers considered her and other women competition, but ... naaw, couldn't be.

v) finding out what she thought about honesty, truthfulness, and lying. An illustration - one Christmas she went down to Toronto to visit her brother for a week and while she was there she naturally went around all her favorite bars there and picked up guys. She also picked up a bladder infection (what were you doing with those guys, hmmm ?). When she got back to Ottawa she had to mention the infection to her boyfriend (I don't know if she mentioned her extracurricular activities). He a) dropped her like a rock and b) ran, not walked, to the nearest VD clinic. vi) her high intelligence. It took her three months one time to figure out that her current boyfriend was married, with three children. It never occured to her to wonder why he wouldn't tell her his right name (it kept on changing), his phone number (5 fake ones - some people got some really weird phone calls late at night) and where he lived. Finally she and a friend followed him home one night. That's when she discovered he was married. She was really upset. She went and had a good long cry. With his wife. (The funny thing is that he and Judy are still on very good terms - he came by and visited her while I was sharing her appartment).

vii) her opinion of men in general. Her current boyfriend (an extremely accomplished/well off guy — who just happens to be married with a 1⁴/₄ year old and a 6 year old daughter — all of which Judy knew) was there to fill two holes — one was financial. Judy was trying to save up money for her vacation and whenever he and she went out he paid for everything.

viii) her tactfulness. An illustration — after two months with Judy he left his wife, but Judy didn't believe him (after all he lied to his wife all the time, so why not to Judy?). So she and her best friend followed him home one night ... and nearly got arrested for loitering. (Another example of her amazing intelligence). When she got back she decided there must be a simpler way of discovering the truth. Then it occured to her! Phone up the wife and ask for the husband ! (At this point she was dancing with glee, saying "I'm so smart! I'm so smart!". No, she wasn't on drugs, nor was she drunk.) The ensuing conversation occured.

"Hello, is [blank] there?"

- "No, who is this?" (lie, Judy, you're very good at it.)
- "His girlfriend, who is this?" (the epitome of tactfulness) "His wife!" (his ex-wife, you mean)

The when the the the the the the

How do I know all this? Because right after Judy gave her boyfriend's wife the surprise of her life (and possibly a nervous breakdown), Judy phoned up her best friend and told her all the gory details.

ix) her habit of letting me know what was going on. An illustration — one night not too long after I moved in I was up late tip-tap-typing away on my computer when I her Judy return from a night on the town. She was very noisy for just one person, but I thought nothing of it. Later on I heard strange noises coming from Judy's bedroom. "She's having a heart attack or something! What do I do?!" So I run to her bedroom and am about to burst in when I notice this strange pair of shoes. Very big shoes. Probably belonging to a very, very big guy. Needless to say, I finally clue in to what's going on, but ... sometimes I wonder what would have happened if I hadn't noticed his shoes

x) and then there was the way she tried to attack me whenever I talked to her friends ...

and ... I could go on for an entire issue. How do I find this type of person? I don't know, but I hope I get over it soon.

derfy

"When the going gets weird, the weird turn pro."



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Life As A Computer Terminal

My name is V.Craig Fourofour and I would like to briefly describe to you the job that I got through Co-ordination and Placement. In their never ending quest to find unique jobs, they have come up with the job of being a computer terminal. The first thing that you will notice if you decide to embark upon this occupation is that the pay is lousy and you are often forced to work 24 hours per day with no overtime. Also, you only have a few statutory holidays, plus a few weeks between semesters. In addition, there is no chance for upgrading. There are many occupational hazards such as being kicked, mutilated by a hammer, or even having someone let their fingers vent their frustration on your keyboard! Finally, the job is very lonely since other computer terminals are very boring to talk to as they only converse in binary (e.g. "110100..."). Also, not many people talk to you and even when they do, they shout at you terms and phrases that I can't repeat here. (However, there once was a young man who had a pleasant conversation with me every day until for some strange reason a couple of guys in white coats came to take him away.)

However, the job is not all bad as we may observe interesting varieties of people. There is the "Do It At The Last Minute" type who comes in just an hour or two before an assignment is due and madly tries to type it in. I have a lot of fun with this type when I pull little pranks such as randomly switching the values of the keys and flipping a few bits here and there in their compiled programs. If I am in a very playful mood I sometimes even crash the whole system.

Also, there is the "40 Hour At A Time" type. This is the person who sits mesmerized in front of me for many hours, hoping that by staring at me long enough his errors will go away. Always happy to oblige, I point out their minor errors for them - while making their bad ones worse.

Finally, there is the "Do It As Soon As You Can" type. These keeners rush over to a terminal to do a computer assignment as soon as they get it. However, I usually see these people later when they find out that they did something wrong or when there assignment is changed a few days before the due date.

There are also a few advantages to the job relating to the co-operative system. I have no problems getting a work-report printed. In addition, I can state on my resume that I have extensive experience with computer hardware and with different programming styles.

On the whole, the job is a unix experience which could leave you terminally ill.

A Gridword For All Seasons

Sifting through the reams of mail we get here at math-NEWS, we found three correct solutions to last issues puzzle, all completed by teams; while the team of P.S,A.C,Moc(?),Les & Webster and the team of Tony Gahlinger, Mark Mutrie, Ricardo Dahab and Claudia Medeiros both handed in solutions, this week's prize goes to Nagamatsu & Rozee. To clarify what this prize is, a two-for-one deal on a mathNEWS subscription means that, come late July, you can come into MathSoc and ask for a subscription for the fall — lo and behold, you get two subscriptions for the price of one.

But enough of these silly considerations! On with the game!

Across

1. deroped improper 5. lesser rubies 11. number of wonders 13. universal asynchronous chip 14. freud's spark 14% port to Manitoulin 16. arab from baha 18. busy hexapede 19. short esmerelda 21. let my cabaret people 22. fish admonish to Billy 23. Italian 'C' 24. sensory bulb 29. shack-built computer 30. home of "the Pit" 31. campus wreckers (abbrev.) 32. part of an ambush 34. wrecked society (abb.) 36. backwards dupe 38. milady's warrior 40. gradual society (abb.) 41. long times 42. quiet sound 43. wordish ology 44. formicidea 46. sap to the gem 48. thanks, shorty 49. sire the angers 52. what iP is not (2 wds.) 54. land of the brave 55. french hi 57. note to follow fa 58. chairman of the cats 59, land of the small

Down 1. trident letter 2. to edit 3. romans went fourth 4. change in form 6. of the plebes 7. amen to our calling 8. attractive rule 9. syn. to 10. 10. pronounces 12. nob'ly prized awards 15. about 17. hunting pal to tally 20. one of the kettles 23. ultimate threat 25. INRI 26. our brand of ADA 27. railroad (abb.) 28. runs through Nanking and Wuhan 29. silent 33 let sam have a heer 35. London's beat district 37. from court to camel Launcelot came 39. rare article 43. hearing the organ 45. space racers (see 54) 47. epistle-writer 50. solar in old Egypt 53. artful society



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I think we just squeaked by on this issue.

dan schnabel

56. gridword author

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