

## Cornerstone: "The Hottest New Business Product of 1985"

On November 1st, at a press conference in New York City, Infocom announced Cornerstone™, the first in a new line of interactive business software.

Cornerstone is a full-featured relational database management system. Data management programs have traditionally fallen into two distinct camps: simple-to-use programs with very limited capabilities, and full-featured programs that require the user to have programming skills (or to hire a consultant who does). Cornerstone was designed to put all the power of this second group into the hands of non-programmers.

With Cornerstone you can design, build, and use sophisticated data management applications without writing a single line of code. These applications could be almost anything — a personnel system, a client-tracking system, or a roster of current Stellar Patrol assignments. Once you've designed your database, you can use Cornerstone for five major activities: **storing** large quantities of data, **selecting** data meeting specified criteria, **sorting** data in a particular order, **calculating** new data, and **reporting** the data. In addition, Cornerstone can **convert** data to or from many other software programs, such as word processors and spreadsheets.

In true Infocom tradition, Cornerstone is special in its style of interaction. But in contrast to the games, Cornerstone is designed to make every decision clear and simple. Most of the time, all you have to do is select an option from a menu. Cornerstone then responds with a new menu, or tells you that it's ready to execute your command. For all other activities, Cornerstone displays a form for you to fill in. At any point, if you're not sure what to do, you can press the HELP key. This will give you a detailed description of your exact position and all your current options. It's like having your very own programmer in a cage. There's more text in these HELP screens than in two entire interactive fiction

games.

Cornerstone also simplifies data entry. Whenever you've entered sufficient characters for Cornerstone to know what you want, it will complete the rest. Cornerstone will also check that your input meets specified constraints (such as minimum or maximum values). And at any point, you can press the OPTIONS key to see a list of all allowable data values. (A lexicographer in a cage?)

### Why Business Products? See page 6

The other mainstay of Cornerstone is flexibility. You're never locked into one way of doing things. If you need to look at your information in a new way, you can create a new report in seconds (with no limit to the number of reports). If you need to add a third phone number for Uncle Morris (he always tries to keep one step ahead of the police), Cornerstone opens up more room in his record — without adding wasted space for everyone else. In fact, all information in Cornerstone is of variable length, so there's never a need to specify how long anything will be. The ultimate test of flexibility is the ability to redefine your database. With Cornerstone you can do that at any time.

Cornerstone comes with a wide variety of tools to make it easy to learn and to use. There's a *Beginner's Guide* with ten interactive lessons. There's an *Owner's Handbook* that explains, in clear English, all the features of the program. There's even a ready-to-use Client Tracking system database, designed to keep client histories, generate mailing labels, and maintain a directory of names and addresses. All these materials come in a unique box that continues Infocom's tradition of award-winning packaging. The box is made of heavy molded plastic; its top swivels down to double as a workstation, and is capable of holding an open manual.

...more Cornerstone on page 9



Cornerstone: The sophisticated database system for the non-programmer.

### Infocom Brings Hitchhiker's Back to Public Radio

We are proud to announce that Infocom has now made it possible for all radio listeners to pick up *Hitchhiker's!* Before it was an interactive story, before it was a TV show, before it was converted into four phenomenal best-selling books, *The Hitchhiker's Guide to the Galaxy*™ was a twelve-part radio serial on Britain's BBC. Now Infocom is sponsoring a rebroadcast of the entire serial on National Public Radio (NPR).

This is radio as you've never heard it before. Conceived and written by Douglas Adams, *The Hitchhiker's Guide* radio serial is hilarious and contains some of the best sound effects ever produced. Before the interactive story came out, many

considered this radio serial the best rendition of *The Hitchhiker's Guide*. If you have never heard it, you will find it funny, outrageous, mind-boggling, and well worth listening to.

Beginning in January 1985, episodes will be made available to public radio stations across the country for inclusion in their schedules. Check local program listings for times — each station puts together its own schedule independently. If your local public radio station is not carrying the show, call to point out that it is available and that you are interested in it (phone calls are surprisingly effective). So tell your friends ... and don't forget your towel.

Who's broadcasting?  
See "Listen Up" on page 4

## EDITORIAL

# Thoughts on Software Piracy

At Infocom, we take an unusual approach to the prevention of software piracy. Rather than spending large amounts of time, effort, and money on designing ever-better anti-piracy techniques (our games come virtually unprotected on a number of machines), we spend our time improving the games and the packaging in order to make them more of a value. Our thinking is that a game which provides a lot of enjoyment will be worth spending some money on, and we feel that our games are somewhat less likely to be pirated on that account.

We are in a fortunate position. Our technology allows us to create sophisticated works of interactive fiction in less time than others might take. In addition, our "machine independence" — our ability to develop a game that will run on dozens of microcomputers — allows us to spread our very large development costs (over \$300,000 per game) over a larger number of total units to be sold. And lastly, consumers consider our interactive fiction to be the best on the market.

Unfortunately, most of the other companies in our industry don't have it so easy. They tend to buy their products from independent developers, who get an advance against royalties and a percentage of the revenues; they have trouble differentiating their products from competing ones, increasing advertising costs; and they must translate each product from machine to machine if they are to sell large volumes, which is both costly and time-consuming. All of this has led to the present sad state of affairs in which very few software companies are profitable. The end result of this trend will be fewer new titles released, more me-too products, and less innovation, none of which are in the consumer's best interest.

When pirates offhandedly joke about the "absurdly high price" of software as if it were some tremendous windfall to software manufacturers, they fail to realize that computer software is *not* a mass-market item. If each game sold millions of units, then the six-figure development and marketing costs would be lowered to less than a dollar per unit. However, very few games sell as many as 50,000 units (most sell far fewer), often leaving a cost per unit of \$5 to \$10, not even including the cost of manufacturing, which can easily reach \$3 to \$4 in the small quantities produced. And don't forget the overhead

involved in running a business: sales staff, product support staff, and the costs involved in getting information (ads, press conferences, trade shows, sales literature, newsletters...) to the retailer and consumer. This overhead easily adds another \$5 to \$10 in cost per unit. Adding all these costs together results in games that cost the manufacturer \$13 to \$24 to produce. Since the manufacturer receives an average of 40%, a retail price of between \$32 and \$60 is required for the product to break even. You can easily see why prices are what they are and why most software companies still can't seem to make a go of it.

Ironically, software piracy hurts not only the companies whose games are pirated but all of today's honest consumers who will have fewer good titles from which to choose. In short, piracy threatens to destroy the industry, pulling down the good companies and the bad companies alike. The person who feels a game is too expensive can do what the rest of us do when faced with the same problem — vote with his wallet and not buy it. How many of us would steal a car (even with the keys in the ignition) simply because it's overpriced?

Software and its documentation are subject to copyright protection; nearly every country in the world provides this protection of "intellectual property." Without it, there would be little incentive to invest time and effort in writing games, books, movies, or music. The copyright promotes these activities by assuring those who undertake them that they will be able to reap their rewards (if any). Penalties are clear: violators are subject to fines of up to \$50,000 and prison terms of up to 5 years. Since violations are a federal offense, the FBI has become increasingly involved in the enforcement of the laws.

Earlier this year, Infocom was instrumental in the formation of the Software Publishers Association (SPA). A prime concern of the SPA has been to combat piracy. We ask our consumers to help Infocom, the rest of the industry, and software consumers in general, by reporting flagrant violations of the law to us directly or to: Software Publishers Association, Suite 1200, 1111 19th Street N.W., Washington, D.C. 20036, (202) 364-0523. Please include any relevant information, such as price lists, phone numbers, and passwords, if such information is available.

We at Infocom take great pride in producing what we believe to be the finest-quality interactive fiction available on personal computers. We have always tried to create the best-value product possible, and we are grateful for the support of our consumers, whom we consider our partners in our efforts. Only with the good-faith efforts of both manufacturers and consumers can we all look forward to an exciting future for home computer software. **□**

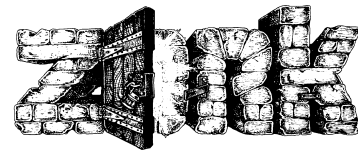
## The New York Times

<b>Managing Editor</b>	Michael "Mike" Dornbrook
<b>Puzzle Editor</b>	Steven "Steve" Meretzky
<b>What Editor</b>	Barry "BJ" Jacobson
<b>Why Editor</b>	Paul "Catfish" DiLascia
<b>Sports Editor</b>	I see no sports editor here
<b>Letters Editor</b>	Jennifer Fine
<b>Ask Jennifer Editor</b>	Li'l Jennifer Fine
<b>Photo Editor</b>	"Shamblin' Steve" Meretzky
<b>Cartoon Editor</b>	Jeff "Jeff" O'Neill
<b>History Editor</b>	Tim "Chomper" Anderson
<b>Suspected Editor</b>	"Cheerful Dave" Lebling
<b>Editorial Editor</b>	Marc "Mark" Blank
<b>Editing Editor</b>	Jon "Caesar's" Palace
<b>Production Manager</b>	Angela "The Whip" Raup

© 1985 Infocom, Inc., 55 Wheeler St., Cambridge, MA 02138

Zork is a registered trademarks of Infocom, Inc. *Enchanter*, *Sorcerer*, *Starcross*, *Suspended*, *Planetfall*, *Deadline*, *The Witness*, *Suspect*, *Infidels*, *Seastalker*, *Cuthroats*, *Wishbringer*, *InvisiClues* and *Cornerstone* are registered trademarks of Infocom, Inc. *The Hitchhiker's Guide to the Galaxy* is a trademark of Douglas Adams.

## Come Work In Beautiful



How would you like to join a team of professionals whose claim to fame is quality? Infocom is growing by leaps and bounds, and we need professionals in product development, sales, marketing, testing and administration.

If you're looking for a brand new opportunity with proven success, consider a career with Infocom. But move fast. . . while we're still in the process of building.

Our business and game software company offers excellent benefits including health, dental and life insurance, and tuition reimbursement.

To find out about job opportunities at Infocom, please send your resume to Donna McCarron, Infocom, Inc., 55 Wheeler Street, Cambridge, MA 02138. We are an equal opportunity employer.

# INFOCOM

# The Shrinkwrapped Falcon

by A. Dashiell Meretzky

It was a hot September day, the kind where horseflies seem to be making their last desperate mischief before vanishing for the long, cold winter. I sat in my office, feet perched carelessly on my cluttered desk, and gazed out the window at Charlie the Hot Dog Man — ageless Charlie, still beating leather down Wheeler Street after all these years.

I didn't have anything to do, or at least nothing worth taking my feet down off my desk for. I'd just finished a job, a game-writing job, and it'd paid a truckload of smackers, and I was in no hurry to get myself another case.

A horsefly landed on the tip of my shoe. I took aim with a rubber band, but a sudden motion startled it into flight before I could shoot. I wheeled around, and saw Ernie Brogmus standing in my doorway.

I quickly dredged up my mental file about Brogmus and found that it was pretty thin. "Burnin' Ernie" he was called by his friends in the trade (of which he had many) and also by his enemies (of which he had none). He'd been Infocom's Production Manager since about mid '83. It was said that not a single game got packaged without Burnin' Ernie knowing about it. He had a rep for handling any problem himself without missing a breath. I knew that if he was coming to me, it could only mean trouble. Big trouble.

I waved Brogmus over to a swivel chair near the window. He was smiling, but I could see worry beneath it. Worry, and perhaps a bit of fear. He sat staring at the floor. "You look like a man with a problem," I said. "Spill it."

He did so, at first tentatively, as though the creatures in the *Zork*<sup>®</sup> poster that dominated my office wall might be listening and jeering, but after a spell the hesitation left. His story gushed out, and I saw at once that this would be no ordinary job.

Production was in a worse mess than a horse stable after a big meal. Three new products were coming over the next eight weeks, and all of them looked like they'd be hot items. On top of that, orders for the new Macintosh version were still backed up from the summer, and 3½-inch disks were still scarcer than fish in a tree. The Four-In-One Sampler, a

promotion meant to introduce green-horns to interactive fiction, was ready for production, but Invisi-Clues™ hint booklets, being packaged for the first time for sale in stores, were crowding the Samplers off the assembly line.

Brogmus had broken into a cold sweat. "That's not all," he continued, nervously lighting up a cigarette. Now I knew things were really serious. I'd never seen Brogmus smoke before.

I had every right to be worried. Everything Burnin' Ernie had said so far meant that Infocom was in hot water up to its disk drives, but now he spilled the really bad news. Several computer manufacturers had

Infocom.

Brogmus looked straight at me for the first time, and I saw how hollow his eyes were. It was obvious the man hadn't slept for weeks, which clicked with rumors I'd heard about his working until three or four in the morning. "Normally at this time of the year, our packaging company would just drag in some extra workers for a graveyard shift, but with local unemployment bottoming out at three percent, there just aren't any bodies to hire. The bottom line is simply that we're selling the stuff faster than we can put it together. Will you take the case?"

My first inclination was to say no. A situation like this was bad news, a

signed a quick lease on some warehouse space outside of town, and that helped the boys dig out from under the avalanche of stored goods. Finished goods began to creep off the assembly line.

It was clearer than a new plate-glass window that these steps weren't enough. Infocom chalked up record September sales of over 100,000 games, and by the third week in October monthly sales soared into six figures again. The back-order list was longer than the beer lines at Fenway Park and growing by the day.

Suddenly, something Brogmus had said as a joke came back to me as an idea. I went to him with a plan, and he chewed on it for a while before spitting out a terse reply. "Let's go see the boss."

Brogmus led me into the office of the InfoPrez, a tough cookie who I knew wouldn't bend an inch for a hurricane. I quickly laid out my plan: Sunday shifts using Infocom employees. We'd boost production and morale in one dramatic sweep! The InfoPrez was reluctant at first; would people accustomed to office work stand up to the rigors of seven hours on an assembly line?

I was betting the rent that they would; I was going for broke. I told the InfoPrez that I'd stake my reputation on it. In the few weeks I'd been working on this case, I'd come to appreciate what a bunch of troopers these guys and dames at Infocom were.

Brogmus and I worked late into the night and spread the word through the grapevine; I posted a sign-up list for volunteers to work that first Sunday. I left space on it for twenty names. By midnight I was sawing wood.

When I got to my office the next morning at 9:30, the list had thirty-five names and was growing like yeast in an oven. I felt the first break in the case; I began to see the light at the end of a tunnel.

That first Sunday was a revelation. These Infocommies, forty strong, worked like gangbusters; and when the quitting bell blared at five, I practically had to wrestle each one off the line to lock up the place. If I hadn't brought a buddy of mine along to snap some shots, I think I'd be

...more **FALCON** on page 8



*Burnin' Ernie Brogmus, left oversees the Infoassembly line. It's his job as Production Manager to know everything — and he does.*

placed large orders, one of them for over 100,000 units. All of them wanted the product, and they wanted it fast. At the same time, Infocom was preparing to switch all twelve of its current games over to new, completely redesigned packaging. A caravan of trucks was lined up at the company that does our packaging, burying the building beneath an avalanche of boxes, manuals, brochures, labels, postcards, catalogs, buttons, matchbooks, Egyptian stamps — the list was endless. To top it all off, Brogmus explained, this was all happening at the brink of the Christmas season. Autumn has traditionally been a nightmare time for Brogmus, and this one was shaping up to be the biggest sales season ever for

monster; it could devour a fellow's career without a trace. But then I looked at Burnin' Ernie's tired face, and I saw the faces of thousands of disappointed customers around the world — "Sorry, Ma'am, we're all out of *Zork II*" ... "Sorry, son, I couldn't find *Seastalker*™ anywhere." Suddenly I heard myself saying yes.

I knew this wouldn't be some easy one-day nut to crack, so I checked into a tiny office on the seedy basement section of the building where I knew the Production types hung out. The smell of hopelessness and despair hung in the air — the odor of old, stale package glue and decaying corrugated cardboard.

The week began to speed by like calendar pages in a B-movie. We



"death notice" and a subscription to A+ magazine. I was thinking you'd know, you having been one of Softline's most prominent advertisers.

I found something in *Sorcerer*™ for your bug department. It is this: you can open Belboz' journal with the key, fine; however, you can't close it. You get an "it's already open" message. Call the exterminator!

Is it possible to call somewhere (hook up in the Source?) to get the mainframe Zork via modem? That would be fun to do. I've always wanted to play the original Zork.

Are you going to convert the old games into the new packaging? If not, will the third *Enchanter*™ match the first two? It would look nice on my shelf.

**BRING BACK ZORK IRON-ONS!**

Sincerely,

**Alexander Eulenberg**

*(Concerning the puzzle, your wish is our command. As for Softalk, they were forced into bankruptcy by creditors. It was sad and sudden — they had assets but didn't have enough ready cash to pay all the bills when they were unexpectedly demanded. We will all miss the Softalk magazines.*

*All of our games are being converted to the new packaging, and all new games will be packaged in the new standard.*

*We have been considering T-shirts, but we're not sure what people would prefer. If you would be interested in Infocom T-shirts, please write in with your suggestions. —Ed.)*

### Hey Guys!

I was sitting around letting my restless mind wander, and came up with some amusing acronyms.

1. Flathead is the supreme G.R.U.E. — (Great Ruler of the Underground Empire)

2. Lord Excessive's job description: F.R.O.T.Z. — (Flathead Reigns Over The Zorkers)

3. The Zork Bank: F.R.O.B.O.Z. Z. — (Flathead's Ridiculously Official Bank Of Zealous Zorkers)

4. Toughness of solving problems in Zork series: P.L.U.G.H. — (Prevents the Losers Underground from Gaining Hope)

5. Status of Krill after being defeated: K.R.I.L.L. — (Krill Really Is a Lonesome Loser)

Hope you enjoy them. Stay tuned for additional insanities ...

**Karl L. Romlke**

Houston, TX

P.S. Please (perhaps) print these in *The New York Times*. Thanks.  
(*Your wish is our command. —Ed.*)

### Dear Zorks:

We liked "Grue Moon" and did some words:

Grue Moon — I saw him standing alone

Without a lamp in his hand

Without a light of his own.

Grue Moon — you knew just what I lurked there for.

You heard me saying a prayer for

Someone I really could snare for.

And then there suddenly appeared before me

Someone without any repellent.

I heard somebody whisper "Please don't eat me"

And when I did the moon had turned to coal.

Grue Moon — now I'm no longer a-gurgling

Without a dream in my heart

Without a meal of my own.

I've been lurking on the railroad  
All the live long night.

I've been lurking on the railroad  
Waiting for Zorkers to come by.

Don't you see the dumb fools coming,

Without repellent, torch, or light?

Now my mouth starts a dribblin'.

I'm going to eat those fools alive.

Zorker won't you come

Zorker won't you come

Won't you come without a light?

Zorker won't you come

Zorker won't you come

Won't you come without a light?

Someone's in the kitchen with

Donald.

Someone's in the kitchen with that

grue.

Someone's in the kitchen with

Donald

Cooking up some Zorkers stew.

**Arlene and Peter Zajicek**

Memphis, TN

### Dear Duf,

On many games I've noticed the letters GUE used. What does GUE stand for?

### Curious in Luling Texas

*(Duffy is away on a case, so we thought we'd try to handle this one. GUE is an abbreviation for Great Underground Empire, where the Zork trilogy is set. It is frequently used after dates; for example, 785 GUE would indicate the year 785 of the Great Underground Empire. —Ed.)*

# ASK JENNIFER

*Jennifer is one of the dedicated Customer Support representatives who answer Infocom's Technical Hotline, providing support for users who need immediate assistance on technical matters. This month, Jennifer provides answers to some of the most common questions and problems that she receives calls about. Hopefully, dealing with the most common problems in this forum will help thousands of users avoid expensive long-distance phone calls. However, if you have a technical problem other than one of those listed here, don't hesitate to call the Technical Hotline, (617) 576-3190. But try not to call between 2:30 and 3:00; that's when Jennifer is taking her nap.*



### Why do I get a "fatal error" when I try to boot my disk?

My daddy told me that these errors are caused by little goblins. Some of these goblins live in the disk drive, and some live in the disk itself. If you send me your disk, I'll give it to Tommy here at Infocom, and he'll tell me whether there are any goblins living in your disk. If there are, we'll send you a brand new disk without any goblins in it. If there aren't, I'll send you back your disk. Then you'll have to take your disk drive to the store where you bought it, and have them kick out the goblins.

### One of the things that was supposed to be in my game package wasn't in it.

Oops, sorry! Occasionally, workers on the assembly line goof when they're making up a package. In fact, I was working on the assembly line just last month [see story on page 3 — Ed.] assembling *Deadline*™ packages, and I realized after doing around 700 that I was putting in pieces of my bubble gum instead of "Pills Found Near the Body." I didn't tell anyone, though, 'cause I was afraid they'd spank me.

Anyway, just send me a letter with some proof of purchase, like the sales slip from the game, and I'll send along the missing piece. It might take me a while, though, 'cause a lot of the pieces are kept on top of a cabinet and only the grown-ups can reach up there.

### Save and Restore aren't working in my game.

That's goblins again.

### I found a bug in the game.

I don't like to hear about bugs; they're really scary. In fact sometimes at night in bed in the dark you can hear them scurrying around on the floor and you have to keep your eyes closed absolutely tight with your blanket completely wrapped around you or else they'll attack and eat you up. But if you call me or send me a letter, and tell me the bug and the name of the game and the release number, I'll pass it along to someone who isn't so afraid of bugs.

### Can you give me a hint?

No! I can't and I won't. And if you don't stop asking me, I'll throw a tantrum! I'm only here for important tek ... tek ... technical matters. If you need help playing the game, you can order a hint booklet by calling (800) 262-6868. By the way, hint booklets are printed in invisible ink which you get to develop yourself — they're really neat!



## Why Business Products?

by Paul DiLascia

When the editor asked me to write an article explaining why Infocom has ventured into business products, I thought: Hmmph. Why business products, indeed! I could just as well ask, why *games*?

Nevertheless, this question often arises in the minds of Infocom fans when they learn that Infocom — famous for its best-selling games, producer of a whole genre of interactive fiction, and home of Floyd — has now introduced Cornerstone, its first business software product.

They want to know what's going on. Business software? Does everyone at Infocom now wear a blue pinstriped suit and read the *Wall Street Journal* every morning? Have we finally lost our marbles — or maybe we've transcended even ourselves? After all, business is serious, stuffy, *boring*.

So I accepted the challenge, hoping to dispel some of these illusions.

We began developing Cornerstone in 1982, over two years ago. Infocom's strategy all along was to compete in the business arena. We just didn't tell anyone. We knew Infocom's software technology could be applied successfully to business products as well as to games.

The games are sophisticated programs as far as software goes. Writing a program that can respond intelligently to an arbitrary verbalization is no easy task. Marc Blank, Dave Lebling, and Joel Berez designed a special high-level language called ZIL (Zork Implementation Language) and an entire development system just so they could write large, complex game programs that would fit on small microcomputers. It's this technology that gives Infocom an edge over its competition.

A similar technology was developed to produce Cornerstone, our new database system. It too is written in a specialized high-level language, and it too is a very sophisticated program. Cornerstone comprises over 75,000 lines of code. Some claim it's the biggest program ever put on a single floppy disk. To write Cornerstone in assembly language would be a Herculean task, not worth attempting by sane mortals. As it is, it took a staff of programmers over two years to write

Cornerstone.

Cornerstone shares another important quality with our interactive fiction. And that's its emphasis on *you*, the intrepid player (called, in business circles, the *user*). Cornerstone makes *you* the architect of your own database and allows *you* to manipulate information the way *you* want. Cornerstone is designed for its users.

In developing Cornerstone, we've tried at every step to anticipate what a sane (or insane) person might attempt to do next. There's a critical difference, however, between Cornerstone and the games. While the games strive to make life difficult — constantly thwarting your best efforts, posing enigmas, even leaving you dead in some remote wasteland — in Cornerstone, we've done everything we can think of to make things *easy*. You'll never need InvisiClues to use Cornerstone, because we've given it a HELP key which supplies hints and suggestions that are so *apropos*, it's like having a wise friend always near.

There are other differences, too. When people first play — I mean *use* — Cornerstone, they sometimes ask why we didn't use a natural language interface as in our games. The answer is this: Natural language is inherently ambiguous, and ambiguity is just what you *don't* want in a database. The equivocation

that adds humor and wit to the games would make Cornerstone a nightmare to use. If you told your database "Show me all the letters from Fred," you probably wouldn't be amused if it responded, "F, R, E, D." At Infocom, we believe in using the right interface for the task at hand.

As to the claim that business products are dull, I point out in defense that different people have different ideas about what's fun. Some folks spend their time manipulating bits of information they call "price-earning ratios" and "bond equivalent yields"; others like to keep track of every last X-Men issue in their Marvel Comics collection. Still others delight in comparing tasting notes for different vintages of Mouton Rothschild. Judging from the early responses, people like these will be pleased with Cornerstone. Some testers have told us Cornerstone is what they've sought for years. Some even claim it's fun!

At Infocom, *our* idea of fun is producing sophisticated, quality software products that erode the barriers between people and computers. It's what we do best. Cornerstone continues the tradition. That's why we made it.

Yet I fear there remain some unsatisfied skeptics who continue to wonder, "Why business products?" For them, I leave this quote from Brian Berkowitz, one of the prime movers of Cornerstone: "We pick the hardest thing to do — and then we implement it." Z



Brian "Spike" Berkowitz: "We pick the hardest thing to do — and then we implement it."

## The Hist

In the beginning, back in the 1960's, DEC (Digital Equipment Corporation) created the PDP-10, a medium-sized computer. The "10", as it was called, became popular at many research installations, and a great deal of software was written for it, some of which is still far in advance of systems on more modern machines. At MIT's Artificial Intelligence Lab, an operating system called ITS (Incompatible Time-sharing System) was written for the 10. ITS was designed to make software development easy. The designers of the system assumed that it would have a small, knowledgeable, friendly group of users, so they did not include any security features.

Around 1970, the ARPAnet was invented. ARPAnet made it possible for researchers all over the country (indeed, all over the world) to communicate with each other, and to use each other's machines. In those halcyon days, access was unrestricted; you could get on from any machine connected to the net, or by knowing an appropriate phone number. Budding hackers from around the country soon discovered that this made a wonderful playground. They also discovered that there were some computers at MIT with some neat stuff on them and no security — anyone who could connect to the machines could log in.

Also around 1970, a language called MUDDLE (later renamed MDL) was developed as a successor to LISP. It never succeeded in fully replacing LISP, but it developed a loyal user community of its own, primarily at MIT's Project MAC (now called the Laboratory for Computer Science) and especially in the Dynamic Modelling Group (later the Programming Technology Division). The Dynamic Modelling Group (DM), in addition to its other accomplishments, was responsible for some famous games. The first of these was a multi-player graphics game called *Maze*, in which players wandered around a maze shooting each other. Each user's screen showed the view of the maze that his or her computerized alter-ego saw, updated in real time. Dave Lebling was among those chiefly responsible (to blame?) for the existence of the

# ory of Zork — First in a Series

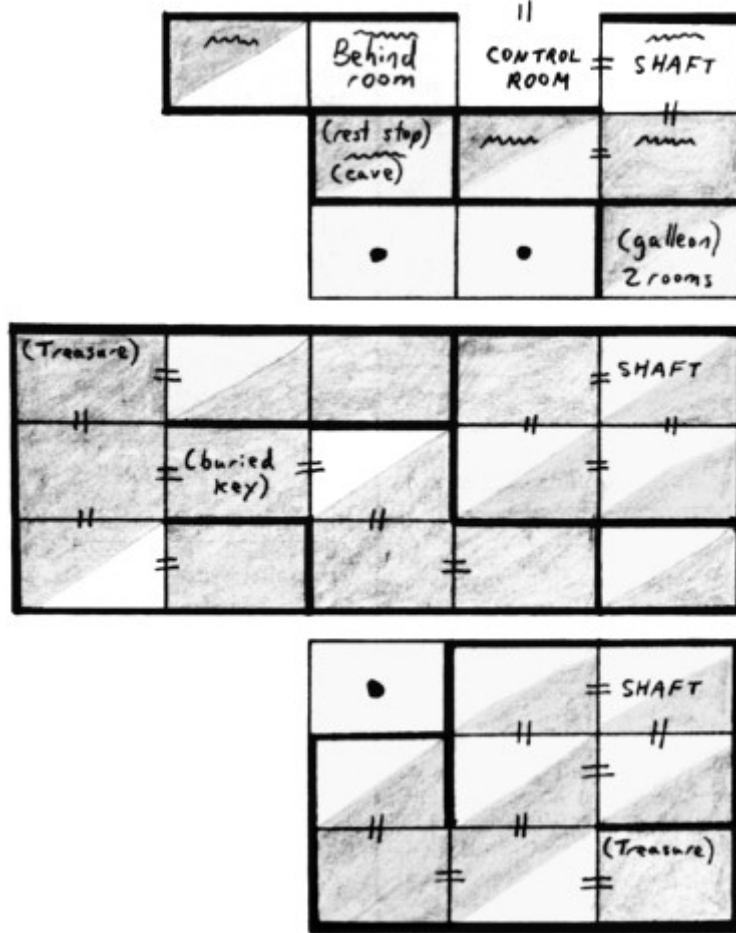
by Tim Anderson

game.

The next game of note was *Trivia* (who says research labs aren't ahead of their time?), an ongoing "can you top this" contest for the truly crazed. *Trivia*, unlike *Maze*, could be played by network users, and achieved wide popularity on the ARPAnet. Marc Blank wrote the second version, and I maintained/hacked it; it was actually a legitimate test of a database system the group used for a research project.

In early 1977, *Adventure* swept the ARPAnet. Willie Crowther was the original author, but Don Woods greatly expanded the game and unleashed it on an unsuspecting network. When *Adventure* arrived at MIT, the reaction was typical: after everybody spent a lot of time doing nothing but solving the game (it's estimated that *Adventure* set the entire computer industry back two weeks), the true lunatics began to think about how they could do it better. *Adventure* was written in FORTRAN, after all, so it couldn't be very smart. It accepted only two-word commands, it was obviously hard to change, and the problems were sometimes not everything one could desire. (I was present when Bruce Daniels, one of the DM's, figured out how to get the last point in *Adventure* by examining the game with a machine-language debugger. There was no other way to do it.)

By late May, *Adventure* had been solved, and various DM's were looking for ways to have fun. Marc Blank was enjoying a respite from medical school; I had just finished my master's degree; Bruce Daniels was getting bored with his Ph.D. topic; and Dave Lebling was heartily sick of Morse code. Dave wrote (in MUDDLE) a command parser that was almost as smart as *Adventure*'s; Marc and I, who were both in the habit of hacking all night, took advantage of this to write a prototype four-room game. It has long since vanished. There was a band, a bandbox, a peanut room (the band was outside the door, playing "Hail to the Chief"), and a "chamber filled with deadlines." Dave played and tested the game, saw that it was pretty awful, and left to spend two weeks basking in the sun.



Marc Blank's sketch for an underwater problem designed for, but never put into, the original *Zork*. The treasures would have been pearls and a trunk of jewels.

Marc, Bruce, and I sat down to write a real game. We began by drawing some maps, inventing some problems, and arguing a lot about how to make things work. Bruce still had some thoughts of graduating, thus preferring design to implementation, so Marc and I spent the rest of Dave's vacation in the terminal room implementing the first version of *Zork*. *Zork*, by the way, was never really named. "Zork" was a nonsense word floating around; it was usually a verb, as in "zork the fweep," and may have been derived from "zorch." ("Zorch" is another nonsense word implying total destruction.) We tended to name our programs with the word "zork" until they were ready to be installed on the system.

By the time Dave got back, there

was a (more-or-less) working game. It probably wasn't as big as *Adventure*, and was certainly less than half the size of the final version, but it had the thief, the cyclops, the troll, the reservoir and dam, the house, part of the forest, the glacier, the maze, and a bunch of other stuff. The problems were not as interesting as those that came later: it took time for people to learn how to write good problems, and the early parsers wouldn't support complicated solutions anyway. What we had done right was all in the "substratum." There was a well-defined (and easily-changed) theory governing interactions among objects, verbs, and rooms. It was easy to drop in new parsers, which happened frequently, since everyone and his uncle tried his hand at writing a

parser (Marc finally became obsessed with it, and wrote the last 40 or 50 of them himself). And it was easy to add new rooms, objects, and creatures (I won't discuss the difficulty of adding new concepts yet).

*Zork*, like *Adventure*, survived only because it was played by people outside the small community that developed it. In the case of *Adventure*, this was possible because it was written in FORTRAN and could run on practically any machine. *Zork* was written in MUD-DLE, which ran on only some PDP-10s. Its user community was the group of "net randoms" that infested the MIT systems; remember that we had no security at all at this time. DM had developed an active community largely because of *Trivia*. Since *Trivia* was pretty dead by the time *Zork* came along, there weren't many other things for the randoms to do, so they hung around waiting for the next game. Early players of *Zork* ranged from John McCarthy, the inventor of LISP (we actually have a copy of the connectivity matrix that McCarthy used instead of a map), to twelve-year-olds from Northern Virginia. No one ever officially announced *Zork*: people would log in to DM, see that someone was running a program named *Zork*, and get interested. They would then "snoop" on the console of the person running *Zork*, and see that it was an *Adventure*-like game. From there, it only took a little more effort to find out how to start it up. For a long time, the magic incantation was ":MARC;ZORK"; people who had never heard of ITS, DM, or PDP-10s somehow heard that if they got to something called "host 70" on the ARPAnet, logged in, and typed the magic word, they could play a game.

Although *Zork* in June 1977 was infinitely more primitive than, say, *Zork I*, it still had pretty much the same flavor. The Flathead family was represented, in the person of Lord Dimwit Flathead the Excessive, ruler of the Great Underground Empire; and the official currency was the zorkmid. Bruce was responsible for the purplish prose where these were first mentioned.

Many of the details of the GUE were whimsical (if not silly), but we weren't completely immune to reality. In those days, if one wandered around in the dark area of the dungeon, one fell into a bottom-

...more *Zork* on page 11

... **Shrinkwrapped Falcon...**  
(continued from page 3)

convinced now that I'd hallucinated the whole thing.

The next day, Brogmus was like a



Michael Berlyn, at the Infoassembly line, doing his famous imitation of Waldo.

man who'd just discovered religion. "This is great! Whaddya say we start dragging these guys in on Saturdays, huh?" His excitement was contagious, and soon we had not only a Saturday shift going, but weekday evening shifts as well. None of the Infocom people were losing their spirit, and they were turning up with husbands and wives and mothers and sisters and brothers and friends, all hungry for some honest labor.

November went by like a whirlwind. Five weeks after that first Sunday on the assembly line, with Thanksgiving dinner still a fresh memory, Brogmus came to see me. He was smiling as always, but now the haunted look was gone. He dumped a report on my desk. "Look at what our folks have done on the assembly line: 62,000 games, plus another 6,000 Samplers and 21,000 hint books!"

It was no surprise to me, and I told him so. "I knew all along these folks were solid gold."

"We're out of the woods," he said, "all set to glide through to Christmas. How can I thank you enough?"

"You're thanking the wrong guy," I told Brogmus, pointing at the report. "It's those guys and dames from Infocom who cast all the right magic spells when it counted." And if any of you good people reading this got or gave an Infocom game for Christmas, try and keep that in mind.

As for me, I'm back with my feet up on the desk just killing time waiting for the next case, or for the horseflies to return in June, whichever comes first.

## Suspect Author Suspected

by Dave Lebling

A few hours after the start of this year's Halloween party, my wife Janet said, "Would you mind getting my makeup kit out of the bedroom? I need to touch up my blood." Since she was costumed as a vampire, and the blood dripping from one corner of her mouth was getting a little tired-looking, I thought nothing of it. I noticed that the bedroom door was closed, so I knocked first (parties being what they are). No one answered, so I opened it, and there, lying half-dead on the bed, was one of the party guests! With her last reserve of strength, she staggered from the room and collapsed onto the living room floor, strangled!

Naturally, I followed her, wondering what was going on, and no sooner did she die than I was accused of killing her. Almost immediately, "Sergeant Duffy" and the "Detective" arrived on the scene and began making a case for my guilt. In a thick Irish accent, the detective interrogated a suspicious group of my friends and fellow Infocommies. The evidence was overwhelming, and it was looking pretty grim. There was an (obviously forged) incriminating letter signed in my handwriting, and (obviously perjured) testimony from people who had seen me with the victim in a local sub shop.

Finally, the detectives searched the body and found another letter that pointed to still more evidence implicating someone else. The murderer tried to flee, but he was captured and handcuffed on the second floor of the house as he tried to make his escape. Justice was done, just in the nick of time.

In the end, a vast conspiracy headed by my wife, Janet, and the co-host of the party, Rick Moore, was revealed. While I had been writing *Suspect*<sup>™</sup>, Janet had been writing this frame-up. While the Infocom testers were finding bugs in *Suspect*, they were also finding bugs in the frame-up. And while I was helping to set up the party, the conspirators were putting the final touches on the play.

For weeks afterward Janet would periodically say, "You're *sure* you didn't suspect anything?" I never had.

I never was a very good detective. Z

## Get Graphic

Infocom is going graphic!

Wait — if you're falling off your chair just now, stand up, dust yourself off, and sit back down. Compose yourself. And then compose the graphic we desire — for inclusion in *The New York Times*.

Since our interactive text (it's been said) is worth a thousand pictures, we'd like to reap the harvest of your imaginations. Draw a cartoon and send it to us. If we print your cartoon in the NZT, you'll win the Infocom game of your choice.

Cartoons will be printed 4¼ inches wide and 5 inches deep — give or take a couple of inches — so draw your cartoons proportionally (but don't fold your entries). Draw the cartoons in black ink only; no pencil or color illustrations. All submissions become the property of Infocom, Inc.

Send your cartoons to: NZT Cartoons, Infocom, Inc., 55 Wheeler Street, Cambridge, MA 02138. Make sure you tell us what game you want to win, what computer you want it to run on, and where we should send it. Z

## Text of Infocom Memo Distributed November 28, 1984

Once upon a time, in the little kingdom of Infoproduction, good King Brogmus looked out from the window of his castle, across the goldfish-filled moat, and saw that a danger threatened the land — a danger in the form of the terrible dragon Backlog.

So King Brogmus met with his wise men, and his soothsayer cut open a floppy disk and spilled its entrails to get a reading of events to come. Finally, after many days, the king emerged from the catacombs of his castle with a plan.

And the king's heralds went forth throughout the land, stopping at every mailbox and calling for volunteers to slay the dragon. And though Backlog was huge and terrifying,

volunteers poured forth from every village and every department to battle the monster.

Good King Brogmus, and his brave knight Sir Eric, led battle after battle against the mighty dragon, and each time they wounded it deeply, but each time it rose to threaten the kingdom again. Then, one day, following the greatest and most tiresome battle of all, after the dragon had suffered sixty thousand wounds (plus another six thousand wounds in its sampler and twenty thousand wounds in its invisiclues), it roared a final bellow of fire and expired. The kingdom was safe at last.

And the people rejoiced, and ate dragon meat, with stuffing and

cranberry sauce, while the king consulted with his advisors once again. And the king made a wise decision to halt the battles, for he knew that even though volunteers were still streaming in from every corner of the land, to continue the campaign might only arouse the equally terrifying dragon Overstock.

So the heralds went forth throughout the land, thanking the good people of the kingdom for their help and their courage. And King Brogmus looked out across the moat, content in the knowledge that Backlog would never threaten the kingdom again, and everyone lived happily ever after.

Until the next Christmas season??? Z



# InfoNews Roundup

## InvisiClues Appear in Stores

Infocom stories are *hard*: they have puzzles, mazes, conniving bad guys, twists, double-twists, red herrings, and hidden clues. And that's what makes them so much fun.

But sometimes you can get stuck — not just momentarily stumped, but really, truly, hit-your-head-against-the-wall, rip-the-disk-into-tiny-little-pieces stuck. That's when you need an InvisiClues hint booklet.

InvisiClues hint booklets are available for all Infocom games. The clues are printed in invisible ink, so you'll never see a clue accidentally. A special marker is included with each booklet, and with it you can develop only the clues you want to see. The clues generally progress from a gentle nudge in the right direction to a full answer.

Until recently, you could buy InvisiClues only through the mail, directly from Infocom. But now you can go to your friendly neighborhood software dealer and buy your InvisiClues there! Every InvisiClues hint booklet tells you how points are scored, includes amusing suggestions, and comes with the special marker and a complete map of the game. (*Suspended*<sup>™</sup> and *Seastalker* hint booklets don't come with maps since maps are included in the game package.) Each InvisiClues hint booklet retails for \$7.95. That's a small price to pay, especially when you can't eat, sleep, or get on with your life because you can't solve a puzzle.

## Omni Magazine Lauds Hitchhiker's Guide

The December 1984 issue of *Omni* magazine called Infocom's version of *The Hitchhiker's Guide to the Galaxy* "riotous" and selected it as one of the Ten Best Computer Games of 1984.

### A Dazzling Dozen

In mid-October, Infocom was shipping 12 stories. And 13 of them were on the top-30 Hot List<sup>™</sup>!

The Hot List shows the best-selling software week by week, and is published by Softsel Computer Products, Inc., the country's largest software distributor. All of our stories had been on the Hot List before, and we see most of them on the list every week. But the week of October 15, 1984, was a record for us: never before have we had so many products on the same list. Since most companies are delighted to see even *one* of their products on the Hot List every now and then, you can imagine how proud we are.

How did we manage 13 out of 12? Commodore distributes *Zork I* for the Commodore 64, and Infocom distributes *Zork I* for all the other major personal computers. Both made it to the Hot List, so *Zork I* actually appeared twice!

When this issue of the NZT went to press (in December), *Zork I* had enjoyed 118 weeks on the Hot List (the Hot List is only 118 weeks old), *Zork II* 114 weeks, and *Deadline* 116 weeks. And if you think *that's* impressive ...

## InvisiClues Disappear from Stores

That's right! InvisiClues have been disappearing from store shelves so fast that the InvisiClues hint booklets have been the *number 1 book* on Softsel's Hot List ever since their debut on October 8, 1984. When this issue went to press, InvisiClues were number 1 for 10 straight weeks.

### New Infocom Games Hit Charts

It didn't take long! *Cuthroats*<sup>™</sup>, *The Hitchhiker's Guide to the Galaxy*, and *Suspect* are already on several best-seller lists, including Softsel's in the United States and Frantek's in Canada.

### Infocom Wins Award

With so many products on the Softsel Hot List, Infocom should win some sort of an award, don't you think? Well, we did!

At the Fall 1984 COMDEX (Computer Dealers' Exposition) held in Las Vegas, Nevada, Softsel and *Business Week* presented Infocom with an award inscribed "Most Titles on the Hot List (Recreation)." This is the second year in a row that Infocom has received that coveted award.

Infocom is displaying the award in its now-famous Trophy Case, which is located in the reception area of Infocom's headquarters in Cambridge, Massachusetts.

## Games Survey by Family Computing Reveals All!

The results of a "Games Survey" were published in the December 1984 issue of *Family Computing* magazine. Readers were asked to name their favorite game-making companies. Not surprisingly, Infocom garnered more votes than any other company. And we didn't even vote!

Respondents to the survey also chose Marc Blank as one of their favorite game designers. As author of *Deadline* and co-author of *Zork I*, *Zork II*, *Zork III*, and *Enchanter*, Marc ranks as one of our favorite game designers too.

### Max Sacks Yak Facts

A recent poll by *CompuNews* magazine reveals that a staggering 97 percent of all interactive fiction gamers have no interest in reading about yaks. Only 0.4 percent indicated a slight interest in reading about yaks, and a mere 0.1 percent liked to read "a significant amount about yaks." Two-and-a-half percent of the respondents refused to answer the question. Infocom Product Manager Michael "Max" Dornbrook immediately announced that Infocom would continue its long-standing policy of not printing anything about yaks in *The New York Times*. (Actually, Michael Dornbrook's nickname is "Mike" or "Mikey." But "Max" made a better headline.) **Z**

### ...Cornerstone

(continued from page 1)

As you can probably tell, we're pretty excited about Cornerstone. And we're not alone. One major distributor has said that Cornerstone "will be the hottest new business product of 1985." Another has said, "Every once in a while, a product changes the shape of the microcomputer market. Cornerstone, Infocom's new database management system, is just such a product."

The first release of Cornerstone is for the IBM PC, PC XT, PC AT, and 100% compatibles. Cornerstone requires a minimum of 256K of memory and two disk drives (or one floppy and a hard disk), and will be

available at the end of January. The list price will be \$495. In the meantime, if you have any questions, drop us a line or give us a call at (617) 576-3190.

**[Editor's note: A free demonstration disk of Cornerstone will be made available in a month. If you are interested, address your request to Barnaby, c/o Infocom, 55 Wheeler St., Cambridge, MA 02138.]** **Z**

At COMDEX in Las Vegas, Infocom strutted its stuff: interactive fiction and Cornerstone. Thousands of people — retailers, computer manufacturers, press, and end-users among them — visited the Infocom booth, picked up DON'T PANIC buttons, and saw the hottest new business product of 1985.



GURTHARK - TUN - BESNAP  
 POET  
 WHLZ

THE DUNGEON MASTER  
 RALPH STILES  
 PHONG  
 ELOYD

TIP RANDALL  
 BELBOZ  
 LESLIE ROBNER  
 KING DUNCAN THRAX  
 ENSIGN BLATHER  
 SENSА

LORD DIMWIT ELATHEAD  
 MONICA LINDER

THE WIZARD OF FROBOZZ  
 ZOE BLY  
 IRIS  
 KRILL

SERGEANT DUFFY  
 WALDO  
 GEORGE ROBNER  
 ?

ANSWER:

**Solution to Puzzle Number Three**

Here is the solution to the puzzle from the Summer '84 NZT. The central column reads "How many points in Zork Two?" making the final answer "400" or "400 points."

There were 191 entries, of which 153 (80%) had the correct answer. The most common incorrect answer was "How many robots in Zork Two? Two" (13 entries). The next most frequent wrong answer was "How many points in Zork III? Seven" (7 entries). There were a number of humorous wrong answers that were close — "How many spells/vaults/dogies in Zork Two?" Other answers included "Fred," "69,105" and "Yes, a pelican."

Twenty-five names were chosen randomly from the correct entries. Here's a list of T-shirt winners:

1. David Sams  
Pasadena, CA
2. Om Prakash II  
Holliswood, NY
3. Edward Stiles  
North Royalton, OH
4. Mindy Miller  
Clay, NY
5. Michael Rosenberg  
Pittsburgh, PA
6. Don Naurocki  
Mission Viejo, CA
7. Michelle Forrest

- New York, NY
8. Robbie Bain  
Morristown, NJ
9. Ed Champ  
Lake Grove, NY
10. Tony Yankovsky  
Brooklyn, NY
11. Zafer Berkun  
Sheboygan, WI
12. Andy Plotkin  
Rockville, MD
13. Sharon Lynch  
Silverton, OR
14. Margaret Sebastian  
Lagrange, IL
15. Lewis Morton  
Merion, PA
16. Bob Bray  
San Jose, CA
17. Gary Laskowski  
Roseville, MI
18. Richard Ruffner  
St. Louis, MO
19. Alex Mueck  
Massapequa, NY
20. Stewart Vachal  
Yorba Linda, CA
21. Bill Shubert  
Acton, MA
22. Bill Duba  
Livermore, CA
23. Jeff Segawa  
Kaneohe, HI
24. John W. Kennedy, Jr.  
Chatham, NJ
25. Mike Surgent  
Lynn, MA

**...Puzzle #5**

(continued from page 12)

- 3,O The ambassador from Blowk-bidden-Gordo has no translator. A brass bell can be found in the Temple in *Zork I*.
- 4,A Shakespeare's *Romeo and Juliet* was Dave Lebling's model for *Starcross*™.
- 4,C The gold coffin is too large to put in the trophy case.
- 4,D The Weasel's real name is William Richert.
- 4,E Marvin is a product of the Sirius Cybernetics Corporation.
- 4,F Aragain Falls is the source of the Frigid River.
- 4,G Steve Meretzky wrote *Planetfall* and *Suspect*.
- 4,H The Wizard of Frobozz only cast spells beginning with the letter Z.
- 4,I *Infidel* takes place near the Nile River.
- 4,J Auda has four grasping extensions.
- 4,K Infocom is located at 66 Wheeler Street.
- 4,L Monica's eyes are blue.
- 4,M All of the trees in *Zork III* are unclimbable.
- 4,N The top speed of the Lawanda-Kalamontee shuttle is 35.
- 4,O One of the cakes in the Tea Room has purple icing.
- 5,A *Infidel* was the first Infocom's Tales of Adventure.
- 5,B The Dining Room of the Robner mansion has a fieldstone fireplace.
- 5,C A babel fish, if swallowed, allows one to understand any language.
- 5,D The Snark resembles a giant cockroach.
- 5,E Marc Blank's signature appears on one of the *Hitchhiker's* destruct orders.
- 5,F You can fold up the cot in *Infidel*.
- 5,G The grue repellent in *Zork II* smells like old socks and burning rubber.
- 5,H *The Witness*™ takes place on a Thursday evening.
- 5,I The crystal trident is found in the Atlantis Room.
- 5,J The weasel aliens live near the green airlock.
- 5,K Earl Davis Jackson is the Editor of *The Washington Representative*.
- 5,L Alligators live in the river near the encampment in *Infidel*.
- 5,M If you turn on the Linders' radio at 10:20pm, you will hear Ozzie Nelson's Orchestra.
- 5,N There are skeletons in *Zork I*, *Starcross*, *Infidel*, and *Hitchhiker's Guide*.
- 5,O Sharon Kemp attended MIT.
- 6,A Whiz cannot leave the area around the Central Chamber.
- 6,B McNabb's pride and joy is his tulip garden.
- 6,C In *Deadline*, there is no way for your character to get killed.
- 6,D The robot in *Zork II* was built by the Frobozz Magic Android Company.
- 6,E In *Cuthroats*, your watch is battery-powered.
- 6,F Leslie Robner's maiden name was Swanson.
- 6,G *Sorcerer* is the third game in the *Enchanter* series.
- 6,H The brass lantern in the *Zork* series is powered by kerosene.
- 6,I The empty cigarette pack in *Infidel* is a Marlboro pack.
- 6,J The *S.S. Hollywood* is one of the 4 shipwrecks near Hardscrabble Island.
- 6,K Rotgrubs are usually around 3 inches long.
- 6,L The Technology Museum includes a model of a Frobozz Magic Cave Digger.
- 6,M You rented your cowboy outfit from a store called Costumes-To-Go.
- 6,N The only exit from the Radiation Lab is east.
- 6,O Pete the Rat got his nickname from tattling on a crewmate.
- 7,A George Robner's record collection includes a Hebrew Prayer Service.
- 7,B There are 69,105 leaves in the leaf pile in the Clearing.
- 7,C The *MCS Starcross* was constructed in 2178 at the Luna City Docks.
- 7,D *Cuthroats* was a collaboration between Michael Berlyn and Phil Wolper.
- 7,E Monica's mother was named Virginia.
- 7,F Flood Control Dam Number 3 is composed of 370,000 cubic feet of concrete.
- 7,G Cerberus has three heads.
- 7,H Zaphod Beeblebrox has three heads.
- 7,I Belboz is a member of the Circle of Enchanters.
- 7,J All three Infocom mysteries were set in the USA.
- 7,K Sgt. Duffy handcuffs Stiles to a davenport.
- 7,L Waldo is impervious to the acid mist.
- 7,M The Brass Lantern restaurant is on the corner of Berez and La Vezza.
- 7,N The red goo in the survival kit tastes like cherry pie.
- 7,O There are eight locations in the Land of Shadow.
- 8,A In *Starcross*, the closest unknown mass is UM91.
- 8,B The original *Infidel* package was shaped like a pyramid.
- 8,C The Aquadome blueprints were drawn by J. Parker.
- 8,D Sam Ostmann is the president of King's Point Realty.
- 8,E An amulet can be found at the bottom of the lake in *Zork II*.
- 8,F The berzio potion increases muscular coordination.
- 8,G On the sub, Tip reads a copy of "Science World."
- 8,H Ford Prefect is a Vogon captain.
- 8,I The Ashcroft's dog is a Doberman Pinscher.
- 8,J The Terror was trapped using a scroll with the KULCAD spell.
- 8,K There are six Guardians of Zork.
- 8,L There are six cars in the Linder garage.
- 8,M There are six members of the Aquadome crew.
- 8,N Veronica Ashcroft's ball was held on Valentine's Day.
- 8,O The animals in the Topiary are

(continued on next page)

- harmless.
- 9,A The artifact's force field projector has four settings.
- 9,B The scroll containing the OZMOO spell is found in the Gallery.
- 9,C According to the Guide, peanuts help replace protein lost during matter transference.
- 9,D One character in *Suspect* is costumed as a giant cockroach.
- 9,E Fort Griffspotter is located near the ocean.
- 9,F The Treasury of Zork contains shares of FrobozzCo stock.
- 9,G There are two Mirror Rooms in *Zork I*.
- 9,H The pills found near Marshall Robner's body were LoBlo.
- 9,I Your lab in *Seastalker* is equipped with a Computestor.
- 9,J The Round Room has five exits; one is to the Loud Room.
- 9,K The first number the band plays in *Suspect* is "Breathless."
- 9,L *Planetfall* includes a brief arcade-style action sequence.
- 9,M The artifact has four docking ports.
- 9,N Floyd's favorite song is "The Ballad of the Starcrossed Miner."
- 9,O The red button in the dam's Maintenance Room turns on the lights.
- 10,A Tor Books distributes four paperbacks based on the *Zork* series.
- 10,B Krill's soul is imprisoned in a tiny crystal jar.
- 10,C The dragon in *Zork II* guards the entrance to the Volcano.
- 10,D Phong is the Robners' butler.
- 10,E *Zork* is a registered trademark of Infocom.
- 10,F Monica's Workshop adjoins the Garage.
- 10,G The Stellar Patrol is a wing of the Fourth Galactic Union.
- 10,H The Wizard of Frobozz wears a fedora.
- 10,I The bartender in *Suspect* is working his way through law school.
- 10,J The AIMFIZ spell is found in *Enchanter*.
- 10,K Only "Doc" Horvak can give you the Universal Tool.
- 10,L Admission to Bozbarland is two zorkmids.
- 10,M The diary in the *Planetfall* package begins on July 22.
- 10,N The Heart of Gold's shipboard computer is named Ralph.
- 10,O The Wizard of Frobozz has a stuffed hawk in his Trophy Room.
- 11,A Rose Ellingsworth lives in Cambridge, MA.
- 11,B In *Zork III*, the waybread is originally found at the Cliff Base.
- 11,C The unicorn has a silver key hanging from its neck.
- 11,D The cover price of *True Tales of Adventure* magazine is \$1.50.
- 11,E The *Scimitar* has two extensor claws.
- 11,F Senator Asher is the first person to find Veronica's body.
- 11,G The INVENTORY command is a feature of every Infocom game.
- 11,H Cabeza Plana and Mareilon were ancient cities of Quendor.
- 11,I The pair of candles in *Zork I*, if extinguished, can be re-lit.
- 11,J You cannot pick up the Linders' cat.
- 11,K An ionic diffusion rasp is located in the Engine Room of the Heart of Gold.
- 11,L Tracks in the snow provide an important clue in *Suspect*.
- 11,M Tracks in the mud provide an important clue in *The Witness*.
- 11,N A seawall protects the mouth of Fropton Bay.
- 11,O Dimwit, Babe, and J. Pierpoint Flathead are mentioned in *Zork II*. **Z**



Above, Steve Meretzky (left) and Douglas Adams at a press conference in New York City to promote *The Hitchhiker's Guide to the Galaxy*. Below, Dorothy Meretzky (Steve's mother) and Betty Rock (Senior Customer Sales Representative at Infocom) crash the press conference.



### ... Zork (continued from page 7)

less pit. Many users pointed out that a bottomless pit in an attic should be noticeable from the ground floor of the house. Dave came up with the notion of grues, and he wrote their description. From the beginning (or almost the beginning, anyway), the living room had a copy of "US News & Dungeon Report," describing recent changes in the game. All changes were credited to some group of implementers, but not necessarily to those actually responsible: one of the issues describe Bruce working for weeks to fill in all the bottomless pits in the dungeon, thus forcing packs of grues to roam around.

The first major addition to the game, done in June 1977, was the river section, designed and implemented by Marc. It survives largely unchanged in *Zork I*, but illustrates very well the problems of building reality. There were minor problems of consistency — some parts of the

river were sunlit (and even reachable from outside), but others were dark. The major problem resulted from the new concept Marc introduced: vehicles. In the original game, there were rooms, objects, and a player; the player always existed in some room. Vehicles were objects that became, in effect, mobile rooms. This required changes in the (always delicate) interactions among verbs, objects, and rooms (we had to have some way of making "walk" do something reasonable when the player was in the boat). In addition, ever-resourceful Zorkers tried to use the boat anywhere they thought they could. The code for the boat itself was not designed to function outside the river section, but nothing kept the player from carrying the deflated boat to the reservoir and trying to sail across. Eventually the boat was allowed in the reservoir, but the general problem always remained:

anything that changes the world you're modelling changes practically everything in the world you're modelling.

Although *Zork* was only a month old, it could already surprise its authors. The boat, due to the details of its implementation, turned into a "bag of holding": players could put practically anything into it and carry it around, even if the weight of the

contents far exceeded what a player was allowed to carry. The boat was two separate objects: the "inflated boat" object contained the objects, but the player carried the "deflated boat" object around. We knew nothing about this: someone finally reported it to us as a bug. As far as I know, the bug is still there.

[Coming up in the next issue: *Zork Assumes an Alias*.] **Z**

## NEW YORK TIMES PUZZLE

## NUMBER 5

Take a piece of graph paper. Make a grid eleven boxes tall and fifteen boxes wide. Starting at the top left corner, number the horizontal rows from 1 to 11, and letter the vertical columns from A to O.

Below are 165 statements, some true, some false. The "coordinates" before each statement correspond to a box in your grid. The number is the row and the letter is the column. If the statement is true, color in the corresponding box in your grid. If the statement is false, leave that box blank.

When you have finished, your grid will contain a picture, message, or graphic of some kind that evokes a particular location in a particular Infocom game. To correctly answer the puzzle, just put the name of the location and the name of the game in the answer space below.

- |  |   |   |  |
|--|---|---|--|
| 1,A The unicorn is never seen in the Carousel Room.                | 1,L Floyd's friend Lazarus was a cleaning robot.                              | 2,H Richard Ashcroft is Veronica's older brother.                                 | 3,E Infocom's technical hotline is (617) 576-3190.                           |
| 1,B The first rod you find on the alien artifact is the black rod. | 1,M The Chamber of Ra has an altar and five exits.                            | 2,I The Summer '84 <i>New York Times</i> was printed on white paper.              | 3,F Cochrane went to the ball costumed as an astronaut.                      |
| 1,C There is only one exit from the Room of Nephthys.              | 1,N The orange cable is found inside Fred.                                    | 2,J McGinty smokes a pipe.  | 3,G Tricia MacMillan is a native of Earth.                                   |
| 1,D Baxter is Marshall Robner's brother-in-law.                    | 1,O There are four tents in the encampment in <i>Infidel</i> <sup>™</sup> .   | 2,K <i>Enchanter</i> InvisiClues is the longest of Infocom's hint booklets.       | 3,H Transit Control Area and Skywalk Gamma are joined by a sloping corridor. |
| 1,E The KULCAD spell can be used only once.                        | 2,A Waldo, Poet and Whiz all think Iris is cute.                              | 2,L The two chalices in the temple alcoves have the same weight.                  | 3,I The GONDAR spell quenches fire.  |
| 1,F The parrot in the Shanty has a peg leg.                        | 2,B Marshall Robner was killed on the night of July 8, 1982.                  | 2,M The number of the escape pod you use in <i>Planetfall</i> <sup>™</sup> is 42. | 3,J <i>Zork III</i> takes place in the year 948 GUE.                         |
| 1,G The lever in the Cryogenic Area revives a clone of you.        | 2,C Mr. McNabb's first name is Alvin.   | 2,N The <i>Mary Margaret</i> and the <i>Night Wind</i> are identically equipped.  | 3,K Zoe Bly is the Commander of the Aquadome.                                |
| 1,H The thief will never steal the platinum bar.                   | 2,D The famous Gabriellic Hyphenated Woman can be found on Accardi-2.         | 2,O Three people have solved the "Impossible" version of <i>Suspended</i> .       | 3,L The gold coin in <i>Cutthroats</i> depicts King Peter II of Spain.       |
| 1,I Infocom released five new games in each of 1983 and 1984.      | 2,E <i>Seastalker</i> is a collaboration between Stu Galley and Jim Lawrence. | 3,A <i>Deadline</i> was released before <i>Zork III: The Dungeon Master</i> .     | 3,M King Duncanthrax was an ancestor of Lord Dimwit Flathead.                |
| 1,J The rainbow turtle is discovered on the beach.                 | 2,F The Winding Stair climbs the northeast tower of Entharion's castle.       | 3,B Monica Linder has a friend named Terry.                                       | 3,N Gurthark-tun-besnap resembles a giant mouse.                             |
| 1,K The Glass Maze has 27 compartments.                            | 2,G Bozbarland has two roller coasters.                                       | 3,C The <i>Planetfall</i> package contains three post cards.                      |  |
|  |   | 3,D Frank Webster was your boss in <i>Infidel</i> .                               | ...more <b>Puzzle #5</b> on page 10  |

ANSWER: Location \_\_\_\_\_

Game \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

T-shirt Size (S, M, L, XL): \_\_\_\_\_

#### CONTEST RULES:

1. All entries must be submitted on this form. No copies accepted.
2. All entries must be received by July 1, 1985.
3. Up to 25 prizes will be awarded. If more than 25 correct answers are received, a drawing will be held to determine the winners. Void where prohibited by law.

#### PRIZE:

A *New York Times* Puzzle Winner T-Shirt

RETURN TO: Infocom  
 NZT Puzzle  
 55 Wheeler Street  
 Cambridge, MA 02138

# INFOCOM<sup>™</sup>

C.S. 6237  
 Farmingdale, NY 11735