O Bolo Mio

In Bolo's world, players form alliances, pilot tanks and command little green men BY STEVE SILBERMAN

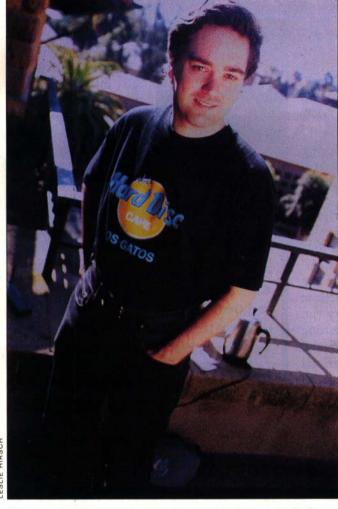
t's war on Everard Island.

T-Rex and sluggo have steamboatcaptainman trapped. He knows where the ammo base is (he knows the terrain and ecology of Everard Isle-in the words of one seasoned warrior-"like he knows his own house"). But his opponents have spiked the earth around it with invisible mines, and their deadly bullets keep coming, buffeting his tank with the horrifying sound of ... a wooden spoon striking a baking pan?

Surely in this fevered battle, with merciless warriors pounding one another, steamboatcaptainman's dire predicament could be accompanied by a better sound than that. The battle-pitch is real, but that noisewell, it's the sound of a wooden spoon striking a baking pan. Just ask Stuart Cheshire, the boyish, engaging, 27-year-old programmer who set this universe in motion. The baking-pan tank hits were recorded onto disk by a couple of Cheshire's friends from the British Broadcasting Corp., who also crunched up a bread bag to make the sound of the trees being farmed, and dropped a beer bottle in the bath to denote a dead tank sinking in deep sea.

Such low-rent sound effects don't faze the players of Cheshire's creation, Bolo, the Apple Macintoshbased multiplayer game where inhabitants fight tank wars, christen themselves with their own (often outlandish) names and form complex alliances with other players.

Bolo-as any of its devotees will tell you-is more than a computer game. It's also one of the most spunky and elaborately developed



Talk to me: Cheshire named the game Bolo, Hindi for "communication."

online subcultures, a benevolent (if consuming) addiction and a wonderful vehicle for the Internet's sense of community. Bolo has opened myriad avenues for players to explore their shared passion for the game with other players from around the world. Bolo channels thrive on Internet Relay Chat (IRC), where players gather to start games, join games in progress or tell war stories. And at least a dozen home

pages located on the World-Wide Web dedicate themselves to the game. Fans have made developing Bolo software enhancements a veritable cottage industry.

How popular is Bolo? Two years ago, when Cheshire checked a program entitled BoloTracker that can clock games played on the open net, there were 20,000 Bolo games enacted each month. (That's not including those played on private networks, such as within Apple Computer Inc., a

notorious enclave of Bolomania.)

"The bottom line is, when you play Bolo, you're playing against other people," explains Rob Darwin, a 23-year-old Baptist minister-intraining and programmer for the Tandy Corp., who is known in the Bolo enthusiasts' newsgroup rec .games.bolo as Tigger. "There's something about knowing that you're playing against someone who is physically separated from you by

hundreds or even thousands of miles -whose face you'll probably never see, but whose intellect you're coming into contact with-as they try to blow you away."

The first time strangers played the game, Cheshire had an inkling of just how captivating Bolo could be. Cheshire wrote the original version of Bolo in 1987, while he was

still a student at Sidney-Sussex College in Cambridge, England. The Bolo prototype ran on an obsolete Apple IItype computer called the BBC Micro made by Acorn. After months of work, Cheshire planned Bolo's debut on a Tuesday afternoon in the old biometry room on campus. In order to prepare, Cheshire patched together a serial network of eight Micros. To make sure the game worked, Cheshire arranged for a dry run of half an hour, starting at 2 p.m., to be followed by the game's official premiere one week later.

While he was setting up the network, other people in the room began asking Cheshire what he was doing, and before long, there were 60 people crammed around the eight machines. At 10 p.m. that night, security had to evict the players from the building.

INSPIRATION

It was James Everard—the designer of Bolo's graphics, for whom Everard Island is named-who suggested to Cheshire that the two write a game for multiple players. "I think James imagined two computers linked by a serial port, and tanks driving around," says Cheshire. "He just wanted to hack something up for two weeks, have some fun and forget about it. But I had a grand idea for a huge map, with little scrolling windows showing you where you are-and not two players, but four or eight or 16. We were not writing what we thought would sell well, or what would be popular. We were writing a game that would be fun for us and would have lasting interest."

> Bolo has a simple, elegant graphical interface-a rectangle divided into 10 windows that relay information about the state of the game. The primary square looks out onto the playing field itself, while a window along the bottom of the screen displays messages between players.

Like most of the great games that have beguiled the human imagination, Bolo is deceptively simple. This is in keeping with Cheshire's intention to create a diversion that, like chess, takes "a moment to learn and a lifetime to master." On the play-

ing field, players appear as tanks, traversing a landscape dotted with swamps, forests, walls and roads. Each tank contains a little green man (the "LGM" or "builder") whom players can send out to build structures, like bridges, or walls to protect them from bullets. To build, players need trees, which they must farm from nearby forests. Bases that provide ammo and other life-sustaining supplies dot the playing field.

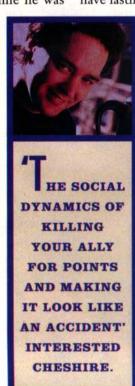
Cheshire says the game's name was supplied by his girlfriend of the time, a young woman from India. "When I was working on the game before it had a name, she would say to me, 'Bolo, bolo, bolo!' " he recalls. "In Hindi, 'bolo' is the imperative form of the verb 'bolna'-to speak-and colloquially it means, 'talk to me.' What it meant in this case was, 'Get off that damn computer and stop ignoring me!' Since the game is all about communication-both computers communicating and players communicating with each other-it seemed like the perfect name for the game."

COLLABORATION

As much as the business of Bolo is conflict, it's equally about collaboration and forming alliances. Two games that Cheshire played while at college-a computer game called Joust and a board game called Diplomacy-helped to inspire Bolo. Both of those games, Cheshire recalls, involved ambiguous strategic alliances. "Joust is played by two players," Cheshire says, "but it's left unstated whether the players are enemies or allies. Occasionally, a player will 'accidentally' kill the other player and apologize profusely, but still get the points for it. The social dynamics there-of killing your ally for the points, and having to make it look like an accident so your ally doesn't take revenge-interested me."

Collaboration also plays a major role in the game's development. When Cheshire released Bolo, he made the file format of Everard Island available to all players, so that they could write their own mapmaking utilities and tinker with the game. The result is that there are now hundreds of downloadable maps stored in Bolo archives, in every shape imaginable, from the island of Grenada to famous faces. So that dedicated players never have to play on the same map twice, an ambitious map utility, called Bolotomy, designed by Bolo devotees Alan Witmer and Jeremy Halstead, transforms any PICT format graphics file into a playable Bolo field.

Besides maps, other players have used Bolo's available code to build



Bolo add-on applications. Several variations of "brains"—automatic tank-piloting programs such as the popular Indy—are available online. These allow players to play against themselves, but Cheshire says the essence of the game can only be realized while playing against other players across the Internet.

Cheshire sees the dissemination and development of his game as a model of collaborative creativity made possible by the net. "The Internet is a very efficient mechanism for communication, and efficient communication is an amplifier," Cheshire says. "For people with talent, it makes their talent go a lot further and allows them to be more creative. I was really blown away by the number of people who wrote programs without any help from me. But Bolo allows all of these people to exercise their talents. The community allows them to express themselves."

It's the act of watching players reinvent the world he made that gives the creator of Bolo the most pleasure. "When the designer of Pac-Man is watching someone play Pac-Man," says Cheshire, "I don't imagine that they're saying, 'Oh wow—he ate the flashing dot and that lets him chase the ghosts; I never thought of that.' There isn't anything in Pac-Man that the programmer didn't think of to start with. But when I watch people playing Bolo, they do things I never thought of.

"I feel completely useless playing Bolo on the Internet," Cheshire confesses. "The good player just runs circles around me, and that's really rewarding, because Bolo is not limited to the things I thought of. I designed a set of rules, like artificial laws of physics, but the outcome is not known by me. That's very exciting."

Steve Silberman wrote about the Grateful Dead for NetGuide's March issue.

Gentlemen, Start Your Tanks

To play Bolo, you need a Macintosh, running System 6.0 or higher. (Stuart Cheshire has no plans to port Bolo to IBM-compatible formats like Windows at this time.) You can play Bolo by yourself against "brains," which are software programs designed to drive Bolo tanks (see below). You also can play on an AppleTalk local area network or on the Internet itself.

To compete on the net, a direct Internet connection is ideal. SLIP/PPP (Serial Line Internet Protocol/Point-to-Point Protocol) connections are barely fast enough for Bolo's innovative networking protocol, which links players' machines in a daisy chain. Slower connections—like standard dial-up modem links—increase the dreaded "lag," which makes games difficult.

You'll also need the latest version of Bolo, downloadable as shareware, from the following sources:

 FTP (File Transfer Protocol) to The Official Bolo Archive at noproblem.uchicago.edu, log on as anonymous and give your e-mail address as the password. The latest version of Bolo, v.O.99.2, is in the /pub/Bolo directory. The Official Bolo Archive contains maps, brains, map editors, the must-read Bolo FAQ (Frequently Asked Questions), strategy guides and a registry of known players.

Other archives to FTP Bolo-related materials are located at *sumex-aim.stanford.edu* (directory path: /info-mac/game/bolo) and mac.archive.umich.edu (/mac/game/war/bolo).

- America Online. Use keyword mgm. Then click the Software Libraries icon and search for bolo v.0.99.2.
 - . CompuServe. Go mac fun, then search for bolo.cpt.

BRAINS AND ADD-ONS

According to MegaWatt (Aaron Bratcher in his non-Bolo life), the curator of The Official Bolo Archive, the fastest and most strategically adept brain is Indy, and the second-swiftest is Ladmo. Both are available via FTP from noproblem.uchicago.edu. (There's also a half-wit brain called Ricklesbot, whose sole function is to insult players.)

Mike Ellis' program, BoloTracker, records and gives information about Bolo games in progress on the net. When you start a game of Bolo, you are prompted to "notify BoloTracker." If you want other players on the net to join your game, you select this option, and your IP address is broadcast to the net, along with the number of players in your game, the name of the map you're playing and other information.

To see a list of Bolo games in progress in North America:

Telnet gwis.circ.gwu.edu 50000

USENET

The Usenet newsgroup for Bolo fans is rec.games.bolo.

WORLD-WIDE WEB

Start with the Bolo Home Page at http://bolo.ncsa.uiuc.edu. This has links to several other sites. Also, you'll find a multimedia Player Registry at http://bolo.ncsa.uiuc.edu/registry/.