

PERSONALITIES

in profile

Mark Randel Turns Hard Work into Child's Play

By Emily Sopensky

► "I love making games. I want to do this for the rest my life," crows Mark Randel. Terminal Reality Inc. (TRI) cofounder and Microsoft Flight Simulator 5.0 codesigner.

Randel, it seems, perfectly fits the stereotype of game developers: boys who don't want to grow up. One imagines an office filled with dart boards, basketball hoops, and trade show giveaways. But ask Randel what toys he values most in his office, and he unhesitatingly names his 450 Mhz Pentium II, his portable DVD player, and his Sony telephone.

Along with colleague Brett Combs, Randel formed TRI (www.terminalreality.com), a technology-driven computer game firm, four years ago. The company creates state-of-the-art, texture-mapped, 3-D action games and ultra-realistic simulation titles. Located in the Dallas suburb of Lewisville, TRI employs 33 individuals who have developed five AAA-rated game titles to date.

Surrounded by the trappings of a serious software engineer, perhaps Randel does not fit the stereotype of an addicted games-player after all. True, he



Mark Randel, Terminal Reality Inc. (TRI) cofounder and Microsoft Flight Simulator 5.0 codesigner.

started programming games shortly after he got his first computer at age 11. Then, equipped with a bike, he hit the arcades and discovered PlayStation and Nintendo 64. But his undergrad years were spent at the University of Illinois, home of the famous computing center. (Yes, one of his friends was working on Mosaic at the time.) After working for Microsoft for three years, he entered graduate school, where he "learned a lot about what goes into a micro-

processor" — valuable background for writing programs that stretch technological limits.

His games are known for pushing the envelope. *Nocturne*, a soon-to-be-released title, includes a shadowing feature that is sophisticated enough to require a Pentium II-class processor. TRI created skeletal modeling techniques

for seamless characters with a continuous polygon mesh and a method of displaying real-time lighting and shadowing combined with volumetric fogging effects. The algorithms required are so distinctive that TRI has filed for patents.

A bachelor, Randel doesn't rely on friends or relatives' children to fuel his interest in making great games. Instead, he cruises through toy and software stores on the weekends to see what's hot. Watching cartoons is also part of his regimen. Noting the cycli-

field trips. For example, to develop Microsoft's CART Precision Racing title, the team visited a number of racetracks. The game, released in late 1997, boasts 15 racetracks modeled from Global Positioning Satellite survey data and true-life physics. The extra effort paid off: By March, the title had garnered a five-star rating and industry accolades.

Another miss on typecasting, Randel does not work at home after hours, and he keeps his staff on a 9-6 schedule. "It's a business, after all," he explains.

Many software developers come to TRI through a word-of-mouth network of peers. Randel finds that neither résumés,

headhunters, nor educational background can reliably identify a good game programmer. "I want to be able to tell someone

to sketch out a model of a spaceship using 300 polygons, hand them a rough sketch, and have them come back to me only when their task is completed. They need to be able to think for themselves."

In other words, for Randel, playing games may be kid stuff but creating them takes an adult-sized dollop of elbow grease.

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cal nature of game popularity, he proclaims that "Monsters, dinosaurs, and monster trucks will always be around." To wit, the second version of *Monster Trucks*, TRI's first simulation, was recently released by Microsoft to rave reviews.

For games that are reality-based, Randel's team conducts