

EXHIBIT 1024



Bluetooth: Does Anybody Really Care?

OPINION By Rick Broida

Given all the dollars invested in and ink devoted to Bluetooth, you'd think it was the Second Coming. It's not, and the computing industry is just starting to realize what I've suspected for a while: Bluetooth is gonna be a bust.

In case you're not familiar with the technology, Bluetooth is a radio-based communication specification that promises to wirelessly tie mobile devices to one another and corporate networks. The idea is that you'd walk into the office and have instant access to your e-mail and desktop files, and be able to send instant mes-

sages to other Bluetooth device users—all without any cables or line-of-sight limitations. Among the devices that will one day incorporate Bluetooth: printers, cell phones, notebook PCs and, of course, handhelds.

Palm has pledged to embed the technology in future models, and even demonstrated a pair of Bluetooth-enabled Palm V's at a press briefing last April. Asking the crowd to envision a board meeting situation, the Palm exec scribbled a note on his Palm's screen, and the words appeared simultaneously on the other Palm's screen. (Think instant messaging with a pen instead of a keyboard.) The message? "He's lying."

I'm glad Palm has found such a productive use for Bluetooth, because no one else has been able to come up with a truly compelling application. Sure, we're told that one day you'll walk into an airport and have up-to-date flight times and gate information beamed right to your Palm—but is that really the killer app? You can get that information by glancing up at a monitor.

Don't get me wrong: I love wireless technologies, and would like to see every future Palm device come with Palm VII-like connectivity. (Attachment modems, like the ones from Novatel Wireless for the Palm V and Visor, are all well and good, but they lack the elegance and compactness of the Palm VII.) But is corporate America going to sink its teeth into Bluetooth? I doubt it—especially where handheld devices are concerned.

First, there's the range situation. Bluetooth devices must be within 30 feet of each other, which limits their versatility. Second, there are power considerations—Bluetooth is apparently so power-hungry that Fujitsu has declined to incorporate the technology in its current mobile devices, at least for now.

The biggest hurdle of all is complexity. Unless Bluetooth operation is totally invisible, users will balk. When I hear PR weasels singing the praises of the technology for notebooks, which will allow users to share files without having to use floppies or cables, I just laugh. How many users can share files across a simple LAN? Not many, because Windows makes it so ridiculously complicated. And few people are going to replace their cell phones with Bluetooth-enabled models just so they can wear hands-free cordless headsets.

Certainly Bluetooth will find its place in a handful of large corporations, but that's it. Bluetooth will suffer the same fate as the Iridium satellite-phone system: it'll cost a king's ransom to put the technology in orbit, and in a year it'll cost even more to shoot it down. What a waste,

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REVIEW

TealNotes

\$13.95 

Software, www.tealpoint.com

TealNotes is a system enhancement that adds drawing capabilities to almost any program that supports multiple-line text entry. Now you can, say, draw a small map in a Memo Pad document where you're writing down directions, or insert a piece of clip art in a Doc file.

The program works its magic by inserting a special string of characters in the text to indicate a TealNote. This means you may see a bit of gibberish in the equivalent record in Palm Desktop, as the graphics don't transfer over.

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NEWS

Game Boy Emulator

Gambit Studios' Liberty (www.gambitstudios.com) is the first Game Boy emulator for the Palm OS. The software runs commercial and freeware Game Boy ROMs, and supports both grayscale and color screens. We'll have a full review soon; in the meantime, speed looks to be the sole shortcoming: the company recommends using third-party overlocking software when running Liberty.

Half-Price OmniSky

If you've been eyeing the OmniSky wireless modem for your Palm V, now's the time to act. From now until August 31, you can buy the modem for just \$149—50 percent off the regular price. (Actually, you pay full price now, and get a \$150 rebate after six months of paid service.) That's too good a deal to pass up.

Enhanced Palm VII Searches

Two of the Web's best search engines, Google and GnuNet, are now available as Palm Query Apps. Find 'em both at www.palm.net.

NEW SOFTWARE

Editing Made Easy 2

This e-book aims to improve your writing and editing skills, and includes professional tips on everything from press releases to business reports. MAH, www.angelfire.com/vit/econlinebook.html

WordSearch 1.0

Can't get enough of those word-search puzzles? This program comes with seven of them, and allows you to create your own using Memo Pad. Way cool. IndVideo, www.individeo.net

WordTris 1.03

Speaking of words, here's a great one that combines Scrabble and Tetris. Jaffasoft, <http://members.tripod.co.uk/jaffasoft/index.html>

Xonix 1.0

Remember the old arcade game Qix? Then take a trip down memory lane with Xonix, a Qix clone. Capture 75 percent of the screen without getting hit by the roving sparks. J.C.C. www.beiks.com