

US government built secret iPod with Apple's help, former engineer says

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An Apple engineer who helped launch the iPod said he helped the US government build a secret version of the device that could covertly collect data.

David Shayer, the second software engineer hired for the iPod project in 2001, said he first learned of the project in 2005, when he received an office visit from his boss's boss.

"He cut to the chase," Shayer recounts in a post published on Monday by TidBITS, an online newsletter covering all things Apple. "'I have a special assignment for you. Your boss doesn't know about it. You'll help two engineers from the US Department of Energy build a special iPod. Report only to me.'"

Custom hardware, custom OS

Shayer said that over the next few months, he regularly helped the two men, who he identified only as engineers Paul and Matthew working for Bechtel (their purported redacted business cards are pictured above). There were mundane tasks, such as Shayer shuttling them from the lobby into the ultra secure quarters where iPod development took place.

And there were the not-so-mundane responsibilities of helping two outsiders to take Apple-provided source code and compile it into the operating system that ran what was quickly becoming perhaps the world's most iconic music playing device. Among other things, Shayer helped the men find their way around the Windows-based developer tools Apple used at the time to build software for ARM chips.

Shayer said that Apple didn't allow the engineers access to its source code server directly, but instead the company provided a copy of the source code on a DVD with the agreement it was never to leave the building. (Apple, Shayer said, ultimately allowed the men to retain the modified copy of the OS they created, but not the source code.)

Shayer continued:

As they learned their way around the system, they explained what they wanted to do, at least in broad strokes. They had added special hardware to the iPod, which generated data they wanted to record secretly. They were careful to make sure I never saw the hardware, and I never did.

We discussed the best way to hide the data they recorded. As a disk engineer, I suggested they make another partition on the disk to store their data. That way, even if someone plugged the modified iPod into a Mac or PC, iTunes would treat it as a normal iPod, and it would look like a normal iPod in the Mac Finder or Windows Explorer. They liked that,

and a hidden partition it was.

Next, they wanted a simple way to start and stop recording. We picked the deepest preferences menu path and added an innocuous-sounding menu to the end. I helped them hook this up inside the code, which was rather non-obvious. In all other respects, the device functioned as a normal iPod.

A Geiger counter? Really?

Shayer said he never learned precisely what the modified iPod did. He knew that the engineers were combining the modified OS with some sort of hardware added to a fifth-generation iPod. The objective was to create a device that could record ambient data and write it to the device disk—all in a way that couldn't be easily detected.

Based on the Department of Energy's oversight of nuclear weapons and programs, he speculates that the secret iPod was to include a Geiger counter that could covertly sniff out stolen uranium, evidence of a dirty bomb development program, or similar things.

Apple didn't respond to multiple emails sent over two days seeking comment for this post. Tony Fadell, who at the time was the senior VP of the iPod division, has taken to Twitter over the past two days to say Shayer's account is accurate and to provide a few additional details. According to Shayer, Fadell was one of only four people inside Apple who knew of the project. Through a representative, Fadell declined to comment. Attempts to contact Shayer were unsuccessful.

"Absolutely spot on David Shayer," Fadell, who inside Apple circles was sometimes called "the father of the iPod," wrote. "This project was real w/o a doubt. There was whole surreal drama & interesting story about how this project was kicked off & then kept secret."

You should have seen the guys behind those 2 engineers... What a trip! I'm still friends with one of them today. Crazy super cool technology the government was working on then... I can only imagine what is cooking these days.
<https://t.co/ysZgmqlldm>

– Tony Fadell (@tfadell) August 18, 2020

There were many people on the iPod team who had no idea what & why those 2 engineers were doing in our offices. Unless you understand the whole picture I'm sure people will have doubts. Those secrets are going to stay safe...
<https://t.co/hzbId2pfxs>

– Tony Fadell (@tfadell) August 19, 2020

While a secret iPod program sounds plausible and has the public corroboration of two reputable people in a position to know, there's some understandable skepticism about the account. Chief among the doubts is that the government's custom-made iPod would be used to measure radioactivity as opposed to, say, private conversations of high-value targets.

"I think it's totally plausible that DOE was somehow involved in a feasibility study, e.g. 'how big of a risk is this' rather than 'build this and we'll deploy it,'" Jake Williams, a former hacker for the National Security Agency, told me. "That said, this sounds like something that you'd want for intelligence operations, particularly gifts to foreign dignitaries, HUMINT assets, etc." HUMINT refers to human intelligence, or the gathering of information through personal contacts.

Williams, who after leaving the NSA cofounded Rendition Security, continued: "Pre-Snowden and Vault 7 this would have been Earth shattering. Not so much now. Unfortunately, as the author notes there is very intentionally no paper trail."

With no paper trail, details of those few months 15 years ago will likely remain a closely guarded secret. No doubt, though, that the account makes for intrigue and almost irresistible speculation.

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