

A;NATION

Disk can archive written word for many millenniums to come Prototype encoded with Bible chapters arrives this week

Jennifer Harper
THE WASHINGTON TIMES
788 words
27 June 2000
The Washington Times
2
A11
English

© 2000 Washington Times Library. Provided by ProQuest Information and Learning. All rights reserved.

In the beginning was the word. And the word must be there in the end too - or at least 10,000 years down the road.

That is the intent behind the gleaming Rosetta Disk, a 3-inch computer disc made of nickel, laser etched with an image of Earth and micro-encoded with three chapters of Genesis - in 1,000 languages.

It is also virtually indestructible, with a shelf life of up to 10 centuries.

The Rosetta Disk will be presented to the world Friday during "The 10,000 Year Library," a gathering of heavy thinkers at Stanford University, all intent on solving a persistent problem for the guardians of the written word: deteriorating or irretrievable archives.

"This is an interim prototype for the deep future," said project engineer Jim Mason, who will stand before a motley group of archivists, anthropologists, cuneiform experts and computer gurus and present his high-tech baby.

"This is experimental, archival technology," Mr. Mason said. "And something more. Our ultimate goal is to make this disc evocative, something to spike the imagination."

It does.

The disc can hold the equivalent of 350,000 typewritten pages and has been pronounced "a secure, disaster-proof solution for irreplaceable databases and document libraries" by the Los Alamos National Laboratory and Norsam, a private company that developed the technology for what they call "HD-Rosetta."

Already, the Library of Congress and the National Library of Medicine have come calling. In the past three years, thousands of historical images and text passages have been transferred to test discs, baked at 300 degrees and left in sea water - among other things - for weeks at a time to test their longevity.

The discs survived in fine fettle.

Which is good news for those government or academic sites that store priceless documents, books, annals, chronicles and other written works.

All are faced with the grim reality of deteriorating or irretrievable archives. Magnetic audio or videotapes and CD-ROMs last only five or 10 years, and there is little continuity between computer data-storage programs that become obsolete, sometimes in a matter of months.

Some experts have called the situation a "time bomb," others think it's a tragedy, a cultural loss.

But Rosetta technology may provide a panacea. For all its futuristic prowess - text is microscopically etched on the disc with an ion beam - the overall principle at work is simple and practical. To retrieve information, future generations need only magnify the disc. It needs no program, no fancy electronics.

This is part of the cachet in the Rosetta Disk project, which comes equipped with cryptic directions for future archivists thousands of years hence: "Get a magnifier and there is more."

The discs themselves, which will come encased in protective steel and glass spheres, will include a steel ribbon for "disc caretakers" to etch with their own names and locations over the eons.

It's meant to create a "unique pedigree for each Rosetta object as it travels through time," Mr. Mason noted.

The prototype to be introduced next weekend at the Stanford symposium is considered a "first acquisition."

Organizers have a whole library in the works - a home for the first Rosetta Disk and those to come.

The actual "10,000 Year Library" is a project of the Long Now Foundation, a San-Francisco-based think tank founded in 1996; the motto here is "slow is the unnoticed frontier," according to research director Danny Hillis, a veteran of computer research and design for Walt Disney Co.

Indeed, the privately funded organization (www.longnow.com) hopes to lengthen the public sense of "the now," promoting the idea that humanity needs to slow down and adopt some long-term responsibilities.

"We want to jump-start some serious, collaborative thinking about how to see information - the real narrative of civilization - in very long-term ways," said Chairman Stewart Brand.

They have a vision, of course - a library fortress in the desert that has the gravitas of a museum and the appeal of a tourist destination. The group also has built a working prototype for a monumental "10,000 Year Clock," meant to tick off the moments all the way to the year 12,000.

For now, though, there is only the first disc, which project director Mr. Mason said will include a language key for translation. Ideally, it will function like its namesake, the original Rosetta stone, a black basalt tablet that gave scientists the means to decipher Egyptian hieroglyphics in 1799.

"Essentially, this is a longevity project," Mr. Mason said. "This is our hedge against dying languages."

Document wati000020010814dw6r00ayj