



0100101103001010RAD The future is Coming On.

With technological advances bum rushing around every corner, the future is racing to create neo-Tokyo. The future? Matrix 2, next year. Artificial food? Done. Cloning? Yup. Now is the time—**now is the future that sci-fi predicted.** What's left? Nothing short of a total paradigm shift.

BY SIMON RUST LAMB

THANKFULLY, SAN FRANCISCO'S LONG NOW FOUNDATION addresses precisely that. By crafting a mechanical clock that will measure time through 12000 AD, they're raising awareness about the future. The first prototype ticks away in London's Science Museum. The second nears completion. Recently, the Foundation purchased a Nevada mountain to house the final clock. In a limestone bunker beneath a grove of the world's oldest trees, the instrument will ring once a day for 10,000 years. Two of the Foundation's leaders, avant music legend Brian Eno (famous for his work with U2, David Bowie, Roxy Music and a million other things) and Danny Hillis (pioneered the idea of parallel computers and a million other things) are computing the algorithm that will give the clock a unique daily chime for the next 3,650,000 days.

Long Now's Executive Director Alexander Rose donates a minute to consider the future.

What will the clock tell? Time, a few manmade constructs of time like calendar systems, and time in a few natural constructs of time, like the sun, moon, and stars. The longest natural cycle depicted in the Clock is the precessional cycle of the equinoxes, the earth's 23-degree axis wobbling around every 26,000 years.

How big will the final clock be? Definitely architectural in scale, you'll be able to walk through all of the parts of it. It will probably want to be between four and eight stories tall.

When do you expect to finish the clock? We finished the first prototype in 2000. The second one is even larger and shows all of the visible planets, we're finishing that up early this year. We don't know when the final one will be complete; it will be about funding and political issues.

Have you chosen specific materials for it? Most for the structural material is Monel. It's a nickel copper alloy, mined

directly out of the earth in Sudbury, Canada, from where a prehistoric meteor hit the earth. It's pretty much like stainless steel but even more resistant to stain and corrosion.

Will the clock require maintenance? Definitely. Maintenance and winding have been built into the clock. The early designs didn't but Danny Hillis felt that if it ignored people, it missed the point. To have a winding ceremony engages people.

Who will be the clock's custodians? Unknown. One of the hardest parts of this project will be when we finish it and who we turn it over to.

There are no less than a million other fascinating tidbits about Long Now. Alexander and their projects that require investigation at www.longnow.org