

## Diabologic: Sentinel

by Frank Dolinar

When I give presentations on nanotechnology, I express the opinion that our understanding and use of nanotechnology in 2008 is little – if any - better than our understanding of electronics and computers were in the early 1960s. At that time, the state of the art for consumer electronics was the Japanese transistor radio and our vision of what was to come was limited. Few people could or did envision computer chips, laptop computers, the internet, or instant worldwide communications.



Legendary science fiction author Arthur C. Clarke, throughout his life, had insight into what was to come and was generally identified as a grand master of science fiction, along with Isaac Asimov and Robert A. Heinlein. His writings were high on my list when I first began reading science fiction, and to this day several remain among my all time favorites. Specifically, the novel *Childhood's End*, the short stories *Rescue Party*, *The Star*, and *Sentinel*, the basis for the Stanley Kubrick film "2001: A Space Odyssey".

Clarke began writing science fiction after becoming a member of the British Interplanetary Society in the late 1930s, but not all of his writings were SF. In 1945, while he served in the Royal Air Force, Clarke wrote an article titled *Extra-Terrestrial Relays*, which detailed the use of geo-stationary orbits to relay radio and television signals all over the world. From that original article:

*"It will be observed that one orbit, with a radius of 42,000 km, has a period of exactly 24 hours. A body in such an orbit, if its plane coincided with that of the earth's equator, would revolve with the earth and would thus be stationary above the same spot on the planet. It would remain fixed in the sky of a whole hemisphere and unlike all other heavenly bodies would neither rise or set."*

With these few sentences, Clarke stated how such satellites would be used and why they would be valuable. A remarkably prescient bit of writing for a 28-year-old radar technician. Today, the geostationary orbit at 42,000 kilometers is named The Clarke Orbit by the International Astronomical Union.

In 1993, *Wired* magazine's Jeff Greenwald traveled to Sri Lanka to interview Clarke, who was 75 at that time. Greenwald described Clarke as "warm, engaging, and tirelessly curious as ever." He went on to say, "One of my most treasured hopes, I confess, was that age and illness would have at least weakened Clarke to the point where I could finally beat him at table tennis. This was not to be. In a humiliating repeat of my past experiences, he won every single game - gloating shamelessly all the while."

At an age when most people would have long since retired, Clarke, at 75, was busy with over a hundred projects – everything from hosting a Japanese TV series to discussing plans for a musical based on his novel *Songs of a Distant Earth*, and reviewing galleys of a forthcoming novel.

Among Clarke's central themes in his fiction are spiritual rebirth and the search for man's place in the universe. Because of his attention to detail and an engineering point of view, his technological details are flawless and he has often correctly guessed new advances in science. His last work, *The Last Theorem*, co-written with Frederik Pohl, is scheduled to be published in August of 2008.

Arthur C. Clarke was made a Knight Bachelor by the Queen in the 1998 New Year Honours List.

In December 2007 on the occasion of his 90th birthday, Clarke recorded a video message to his friends and fans bidding them good-bye. He died on March 19, 2008, at his home in Colombo, Sri Lanka, where he had lived since 1956.

If you are interested in learning more about Sir Arthur, his achievements, and his legacy, visit the site of the Arthur C. Clarke Foundation (<http://www.clarkefoundation.org/>).

