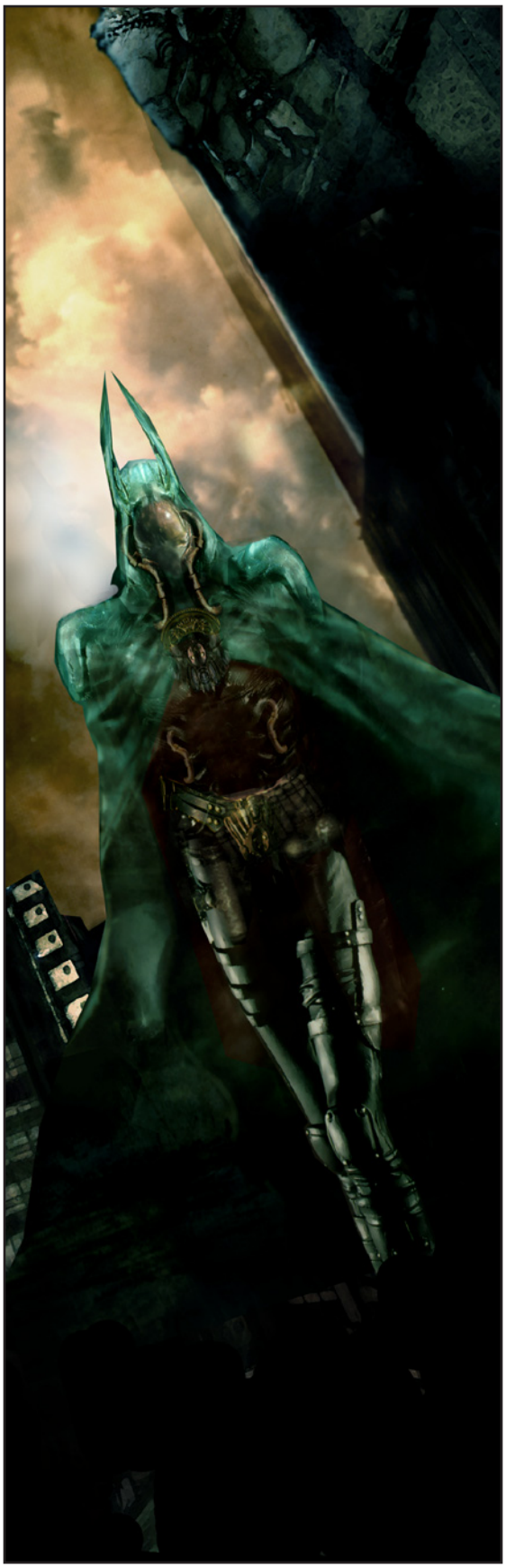

the morning of April 29, 1977, just moments after the craft became the first vehicle to exit the solar system. Months before, the readings of the craft confirmed something which scientists had long guessed: A charged bubble of high-energy particles, the Heliopause, surrounded the entire solar system. Beyond it lay the true emptiness of interstellar space.

The readings beyond the Heliopause, relayed back to mission control faster than the speed of light, were odd.

Nerut saw the truth inside the discrepancies from numbers sent back from the probe, and scribbled down what would become the most significant mathematical formula since "e = MC²" on an old McDonalds wrapper.

The Nerut Heliopause Doppler Theory predicted that the Heliopause distorted every radio signal entering or exiting the solar system under a certain wattage, causing clear signals to be disrupted and lost in what sounded like cosmic static. He didn't realize the implications of his discovery until he tried it out.

Nerut quickly reconfigued the 22-meter dishes of the Jet Propulsion Laboratory to compensate for the distortion of the Heliopause and realized very quickly that his theory had just become a fact. Almost every main sequence star, "seen" for the first time clear of a distorting Heliopause, was transmitting an intelligent signal.

Each world, trapped within the silence of its own Heliopause, believed it too was alone.

The universe was brimming with intelligent life.

Project EARSHOT (1977)

The Heliopause Doppler Theory was immediately classified and a huge project was created to decipher the myriad signals being heard. Hopes were high that they would yield some sort of technological leverage. Sixty-three hyperbrains spent three years attempting to decipher the specifics of two particular signals with little success. Despite various intriguing pictures pulled from the transmissions showing alien vistas and creatures (some showing things which could not even be identified), the project came to the conclusion that little or nothing of applicable use could be gleaned from the signals. This was not what the American military industrial complex wanted to hear.

In the face of this "failure" EARSHOT was reconfigured as a think-tank to consider the problems evident in first contact with an alien species. Despite the fact that the world public believed this had already occurred (with the Roswell crash and IAM), few hyperbrains were under such illusions.

Most believed IAM was nothing more than another deranged Wild Talent.

EARSHOT ran thousands of simulations of a first contact; including war simulations. Hyperbrain Daniel Baxter Smith predicted that first contact would occur within a decade, whether Earth instigated it or not. He ended his report with an ominous statement:

> "We will not be the first beings to have discovered the Heliopause and its properties, or to monitor alien transmissions. We should therefore prepare for war. If they are coming, and I believe they are, they will come not as saviors but as conquerors."

Portables (1978)

In just six years, Xerox and the government of India had redefined the concept of computing. No longer were they impersonal washing machine-sized boxes found only in government labs and colleges, they were as personal and as useful as a journal or diary. Riding the crest of the wave was the Indian software firm Veda, run by the brilliant Abhijat Maharajapuram, a programmer who rapidly became the world's richest man through his clever licensing schemes and an exclusive deal worked out with Xerox in 1971. By 1978 Veda was a world name, bigger than IBM, McDonalds and Coca-Cola. Xerox and Veda were seen as an unstoppable force in computing.

Over 255 million Xerox Home Offices had permeated the globe, creating the Grid, a new way of communicating. Nearly everyone on the planet had access to D-Mail account and computing was taught in schools all over the world. But this was not enough for Xerox. In 1978 the company announced the Xerox Notepad, a hand-held portable computer with nearly all the functions of a Xerox Home Office and some new, dramatic breakthroughs. It retailed for 600 dollars and was an instant hit. It integrated hand-writing recognition as well as portable phone functionality.

Within two years the success of the Notepad dwarfed the sales of the Xerox Home Office. In ten years nearly everyone in the civilized world carried the descendant of the Xerox Notepad everywhere; it was diary, telephone, D-Mail access point and more.

The age of ubiquitous computing had dawned.

The American-Soviet Space Treaty (1980)

Newly inaugurated President Walter Mondale made the startling step of convening with Soviet leader Viktor Grishin in Iceland just weeks into his presidency. Mondale had just been briefed on the Heliopause Doppler Theory and had read Daniel Baxter Smith's proposal that an invading alien force might be heading for Earth. To the press the meeting was about a space treaty, perhaps to control the directed kinetic weapons escalation which had been building since the mid-1960s. In truth, Mondale confessed to the startled Russian leader that America had detected alien signals, and though he refused to share the science behind it he did share all information on what was monitored from those signals. Grishin was horrified, both by the speculation of American hyperbrains that an attack on Earth could be imminent and the fact that America had failed to alert the world to the situation.

Mondale and Grishin very quickly formed an unlikely friendship despite the circumstances. The Soviet leader realized that Mondale had just come by the information and was completely truthful. To the public, the meeting and signing of a space treaty in just 14 days seemed incredibly out of step with the previous direction of the Cold War.

Once the Soviet military saw some of the simulations of an attack on earth by an alien force, no one saw any choice but to agree to the treaty. NATO and the Soviet Union began cooperating quite suddenly and within a year were performing joint military exercises on their borders in Europe and in the Middle East. The world was thrown for a loop, but it looked like the Cold War was suddenly and unexpectedly coming to an end. The first Soviet astronauts were soon visiting American facilities on the Moon and Mars and the Soviet and American space program planned several joint outposts on moons of the outer planets. These were actually to be monitoring posts built to search for probes, ships or even creatures that might visit the solar system.

The world didn't know it, but Russia and America were preparing for the greatest threat mankind had ever faced. No one knew when or from where it might come, but few in the know could deny the facts—Earth was surrounded on all sides by unknown species with technology that could be centuries beyond that of man. Suddenly the conflict that had driven the world to the brink of self-destruction seemed foolish. Mankind's only hope was not religion, ideology or nationalism; it was unification.

For the first time in human history, at least in limited circles, it was Earth vs. everyone else.

"The End of All Things" (1982)

As the heuristic computer at the center of project EARSHOT continued to catalog individual signals