

The Jancsi System

ZM Engineering was a mining and construction automation firm active just before the Fall. Taking advantage of the rapid growth of nanotechnology and AI they were on the cutting edge of designing protean nanoswarms and self-replicating equipment. While there was a fairly universal ban on self-replicators on Earth (after the embarrassing Tan-Tan incident 14 BF where automated solar collector devices became a pest, and a few more scary but hushed up mishaps with proteans) much research and application occurred in space. ZME had installations on Luna, Mars and in the Belt where they used self-replicating devices to scout and claim large areas. In terms of actual replication rate dedicated assemblers tend to beat self-replicators since they can get economies of scale, but in rough environments or for initial colonization the replicators were economical.

When the Fall came self-replicator systems tended to become hotbeds of TITAN or exsurgent activity: the control and software update mechanisms were easily hijacked by advanced enemies, and even if they weren't suborned most transhuman sides tended to assume they were. ZME disappeared in some of the earliest attacks, their corporate systems infiltrated by AI malware bent on using their equipment to get staging points across the solar system. After the Fall self-replicators were seen as too risky to continue.

Except of course that a few are still left.

The Jancsi System was developed to claim a large number of asteroids for ZME. The system consists of an cornucopia machine "hive" that can manufacture drones, solar collectors and colonizers. The drones are simple solar powered robots that gather material (typically asteroid rubble) and provide it to the CM, as well as connect solar collector panels to the "hive". When an asteroid has been fully colonized the system begins to make colonizers. Colonizers are capsules containing a seed CM, a few drones and enough solar collectors to get them started somewhere else. The mother colony makes enough metal/oxygen solid fuel to launch it towards other asteroids; the delta-v is not great, but waiting for a year is not a problem for an AI (or for a company wanting to own an enormous number of asteroids, each with a remotely programmable CM).

During the Fall the few installations that had been built were subverted. But there were a few colonizers in transit. Powered down and overlooked, they found their target asteroids and began to grow. Slowly the number of Jancsi installations is growing.

The robot hives are not intended to be dangerous - just scraping up regolith, digesting it, making more equipment and installing it. However, they might not see people as anything but very high-grade carbon and volatile resources, exactly the substances they need the most. Or ZME did have a slightly more paranoid bent, and had the installations build some defensive measures for claim jumpers. Defences that have been extended for years as no new commands have come in.

Adventure ideas

Quest for fire: the PCs (or somebody else) finds out about the Jancsi system and wants to grab it. ZME is gone, it is technically unowned, and it could potentially allow free manufacture across a widely dispersed set of belt locations. Perfect for paranoid Firewall agents... or autonomists wanting to break Consortium nanocontrol... or criminals... exhumans... terrorists. Of course, finding the colonized asteroids might not be easy. The original sites might be mentioned in old ZME files, but are now dead or infected. To find where colonizers went they have to be visited and their logs analysed -

or the quick, encrypted directional messages sent back to ZME headquarters on Earth intercepted. And once they are found, the AI must be adjusted to obey the new owners.

Do the evolution: the installations are actually evolving. This might not have been in the original program at all, but occurred due to the hacking during the Fall. Different hives build things differently, trying out alternative solutions. Several may compete aggressively on the same asteroid, with some hives starting to "recycle" and repurpose the components of other hives. This may prove dangerous for visitors as robots begin to try to use them too. Even worse, the hives might want to hitch a ride with passing spaceships to get to new asteroids more easily.

What is my purpose in life? The sane and rational thing is to run self-replicators with very little AI. But for some reason there is a full AGI in charge. Maybe it was a slip, maybe something evolved in the system, maybe it is what remains of ZME's corporate AGI. Now it is expanding through the asteroid belt, each installation forming a widely separated node in a vast and slow community. What should they do? Expand indefinitely? Protect themselves against the potentially dangerous outsiders? An old, distributed AGI with pre-Fall lack of limits might be very dangerous - or an amazing ally. It might even be a Promethean in hiding.

Last man standing. Firewall agents are called to try to stop some beltters/smugglers/others from taking over the system and using it. It would be a dangerous tool, best kept out of everybody's hands. Yet there seems to be more to the story when they investigate: how did their opponents get access in the first place? Who gave them the necessary codes? And why does it look like somebody is *arranging* for a conflict over the system?