GODSPEED

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The Genizee came.

Two weeks later, the Genizee went.

The aliens are the most self-sacrificing and noble saviors of humanity that anyone could imagine; or else they are the sneakiest and most evil species in the galaxy, following a diabolical agenda that no human is able to fathom.

Which?

Marcus Aurelius Jackson, a millionaire, a madman, a genius, and my long-time partner in science and short-time partner in crime, says the Genizee are villains. Everyone else on Earth says that they are heroes. Me, I just don't know.

Not yet. But thanks to Marcus, I*will* know. Soon. In the worst case, it may be for just a fraction of a second, before the end.

It sounds crazy to say it, but although I think of myself as sane and rational while Marcus is a lunatic who may cause my death and the death of everyone on Earth, I'm as bad in some ways as he is—because I can hardly wait to learn the answer. That question—*Which?*—has been sitting in my mind for four months going on forever, like an internal and eternal itch that can't be scratched.

I sit here, waiting for the re-appearance of the television cameras or the end of the world, and I want to *know*.

In my case it is more than a theoretical issue. I was in the middle of the problem long before the arrival of the Genizee—before their existence was even suspected. More than that, according to the aliens, I and Marcus Aurelius Jackson are the reason that they came to the solar system—came, just in time to kill the dream.

In my case, it*was* a dream. In Marcus's case, it was an obsession. I argue that there is an important difference between the two, though perhaps no else would agree.

Let me go back to the period BG—Before Genizee.

Before the aliens popped out of nowhere, most people thought that the world's space programs were going well. The United States had the Farside lunar base close to self-supporting, with a ninety-nine percent closed recycling of food, water, and supplies. Only the most complicated equipment was fabricated and shipped up from Earth. The Soviets had their permanent Mars colony, at last, after three abortive tries and the loss of one hundred and forty-seven people. The C-J consortium had a mixed Chinese and Japanese expedition wandering the asteroid belt, and another approaching the Jovian moons. ESA had their own explorer—unmanned, this one—heading out for a second Grand Tour with smart probes of the outer planet atmospheres.

This is truly the Golden Age of space exploration, said the media.

Big deal.

Don't be surprised when I tell you that although space funding paid my salary, not

one of the developments that I mentioned occupied my working attention for more than one minute a week. Marcus and I fumed at the self-congratulatory speeches from the politicians of all countries, and wept when the "great accomplishments" in space were touted by the world's media.

Couldn't they see—couldn't *everyone* see, as we saw so clearly—that even when the Moon and all the planets were explored and colonized, we would still be playing in our own backyard?

If humans wereserious about exploring space, the solar system wouldn't do. We had to go to the stars, and we had to find a way to get there in a reasonable time. The fastest ship in existence, the Caltech/NASA Rocket Propulsion Lab's Continuous Electric Propulsion Planetary Probe (*Starseed* for short) was now heading for the inner edge of the Oort Cloud, but it would not arrive there for another ten years. That, measured in terms of my own life span, was surely not areasonable time. And when it got there, three thousand astronomical units from the Sun, it would still be traveling at only one percent of lightspeed, and be only one hundredth of the way to the nearest star. Tau Ceti, our best bet for a close star with useful planets, would be a millennial journey for the RPL probe. Despite its name, the*Starseed* and its relatives were not and would never be the answer. They could not bring the stars within reach of humanity.

A faster-than-light drive: that was the way to go. The *only* way. Unfortunately, you couldn't even mention FTL to the Science Foundations who funded us. Marcus had tried it, and been ridiculed for his pains. Their committee of advisors was quite adamant. Nothing could go faster than light, the theory of relativity "proved" that, so not one cent should be wasted in trying. Instead we should spend the Foundation's money on something *useful*, like plodding ion drives or bone-jarring pulsed fission.

"Dummies!" said Marcus, when he got back to the lab. "Stupid jerks." He had said much the same thing to the committee, and it hadn't helped his case.

"I know," I commiserated. "They're a bunch of idiots. Curse 'em all."

I did a lot of cursing in those days, and without Marcus, that would have been all that I could do. With him, though, I had as my partner a top-drawer physicist who had studied the absolute basics of quantum theory and relativity, instead of taking them as gospel. He had done so with one goal in mind: looking for the loopholes.

They were there, of course. Everyone from Einstein onwards had pointed out that the two fields were inconsistent with each other. And even within the framework of those inconsistencies, the structure of spacetime at a subnuclear level had to be a sea of singularities, continuously forming and dissolving. The very notion of "travel" through such a discontinuous medium in its constant flux was meaningless, said Marcus. It was the learned advisors to our funding sources, sitting in their smug certainty, who needed to go back and do "something useful."

I knew he was smarter than me, and anyone else I'd ever met. When he said that he saw a ray of hope, I believed him. His failure with the committee, and their ridicule, didn't shake my faith in him one bit.

"We have to keep trying," I said. "Show them they're wrong."

He shook his head gloomily, but soon he was working harder than ever. Rejection merely drove him to greater efforts. In the next few months he developed the theory further, and it looked good (to him, I mean—I admit that I couldn't follow it).

The next steps had to be mine, though. I was the fix-it member of the team, because Marcus was terrible at practical details, and the diverse techniques for lubrication of egos that these days are lumped together as "human relationships" were quite beyond him.

So I "fixed it." With, if I say it myself, my usual efficiency. (I sometimes think that the only thing in life that I find truly irresistible is the challenge to finagle something that everyone else says can't be done.)

Money wasn't the issue. Marcus had inherited bundles of that, and had found little use for it, but the equipment that we needed couldn't be bought. It was available only through government programs. So the prototype construction, and the first small-scale tests, had to be worked secretly using materials bootlegged from approved conventional projects. If that sounds easy, remember that all the construction had to be done*in space*. Without assistance from Inventory Control, who owed me quite a few favors, it could not have been done at all. Even then, it was not totally invisible. Someday an enthusiastic auditor would discover that the equipment orders and use did not match, and the game would be over. Long before that I expected to have gone to hell or Alpha Centauri.

It took five and a half years from the day of Marcus's key theoretical insight to the first space test. On that day the two of us, crowded into a small cargo capsule never intended for anything but free-fall storage, paused and looked at the little payload, then at each other.

"Well?" he said.

I nodded. He drew a long breath, shrugged, and toggled the switch.

The payload vanished without a sound.

The test transition—Marcus insisted that it shouldn't be called a test*flight*, since the payload would not be "traveling" through normal space—had been designed to carry an array of sensors eighty million kilometers to the vicinity of Mars, take a handful of pictures there, and return to the cargo capsule. It was supposed to be gone for just twenty minutes, almost all of it spent out near Mars.

Twenty minutes? I have known shorter months.

When the tiny payload popped back into existence, we both gasped. And when we examined the data it had collected, I at least got a lot more than I had bargained for.

The payload had not made the journey to Mars in a single hop. Instead, Marcus had programmed it to drop back periodically into normal space, make an instant navigation fix, and use that to direct the next transition. The resulting set of images

was mind-blowing. The fixes had been taken every hundredth of a second, two hundred thousand kilometers apart. Seen in real time, they provided the series of frames that would have been obtained by a ship traveling at twenty million kilometers a second—nearly seventy times the speed of light. God speed.

I watched those movies about a hundred times in the next twenty-four hours, drunk with euphoria and the conviction that Marcus and I would ourselves be remembered as gods. We were the New Prometheans, the men who gave humanity the universe. (Like most people who play with fire, I had forgotten what happened to Prometheus). I wanted to go public with our results, right away. As I told Marcus, we had more than enough evidence to justify funding for a complete series of operational tests.

At that point, he dug in and couldn't be budged. The establishment hadn't just said a polite "No thanks" to his theory, or pleaded poverty to explore it. They had*mocked* his ideas, suggesting that he was a crank or worse. Now he wanted to make *amanned* flight, go out in person farther than anything had ever been, and take hand-held pictures. Then he would come home, go to the skeptics who had told him he was a charlatan, show them our results, and invite them to stick it in their ear. Before that, he wanted complete secrecy.

Fame and fortune weren't enough, you see. He wantedrevenge.

I should have refused to go along with him, but he always burned a lot brighter than me. We argued for hours, until at last I gave in. He told me what he wanted for the Big Test: out a thousand astronomical units, so Marcus could get a shot of the *Starseed*, against a backdrop of the shrunken Sun and scarcely visible planets.

If finding the resources for the small test had been difficult, the new one—manned ship, life-support, full navigation and control systems—had me tearing out what was left of my hair. To be honest I also had a wonderful time, juggling three dozen people and organizations at once, but it was still another six months before I could go into his office and say, "Well, you asked for it, Marcus, and you got it. We're in business. All-up manned test for Project*Godspeed* is set for one week today."

"You actually got the flight permits, Wilmer?"—that's me—"How'd you fix it? I'd have bet it was impossible."

This had been one of our main worries. Stealing equipment had become fairly routine, and we had even managed to divert attention from our true activities by describing the *Godspeed* itself during the ship's construction as a "pulsed fission-fusion pre-experimental post-design model," which was enough to put off anyone. The earlier test had been on a scale small enough to hide. But the new one could not be concealed, since although the FTL transition should produce no detectable signal, according to Marcus the macroscopic quantum events leading up to it would make the *Godspeed* 's whole exterior sparkle and glitter like a cut gemstone catching the noonday sun.

"Itwas impossible," I said. "I had to use all my chips on this one. I wouldn't be surprised if we get caught."

"Who cares?" he said. "When we get back from this trip-"

And at that precise moment, when the day of glory was within reach, Sally Brown from Ground Operations came running into my office without knocking, switched on the little tv set that perched on the corner of my desk, and said breathlessly: "Messages and pictures. Coming in from space. All over the world, hundreds of different wavelengths. Not from Earth. From the stars."

* * * *

I don't know what Sally Brown's words did to Marcus, but they created in me such a conflict of emotions that I wanted to throw up. On the one hand, the arrival of aliens and their superior technology would make all our work for the past few years as obsolete as the horse and carriage; on the other hand, I would have what I had wanted for so long: access to the stars.

We froze in front of the tv screen, waiting for our first look at the Genizee.

What we got instead was a look at their ships, inside and out, and at their technical equipment. No pictures of aliens, not then. We learned later that they weren't sure Earth people were ready for three-foot-long cylinders of quaking black jelly, topped by a writhing mass of yellow spaghetti. Instead, we got pictures of technology.

Oddly enough, it was the sight of the ships that Marcus and I, alone of all the people on Earth, found hardest to take. The video signals had been beamed to Earth a few hours earlier, from just beyond the orbit of Saturn, along with a series of radio messages—in seven major Earth languages—proclaiming peaceful intentions and giving a projected arrival time at Earth equatorial orbit in less than a week. The radio messages we could take. But the ships...

Marcus caught on first. "Where is it?" he said, almost under his breath. "Wilmer,*where's the drive* ?"

No one else would have been able to understand his question. But I did.

The forms of certain technologies are dictated completely by the laws of chemistry and physics. That includes all propulsion technology. For instance, a rocket is a rocket, no matter whether the propellant is hot neutral gas, ionized particles, or radiation; and it makes little difference if the energy comes from chemical or nuclear processes. Similarly, a laser is a laser, regardless of wavelength or energy level. And the FTL drive that Marcus had conceived, and that we had both been working on so hard, had its own characteristic physics and signature.

The Genizee ships showed no sign of that signature. Either they had traveled across the interstellar void using a method which was so advanced that we could not recognize it; or—far more likely, in Marcus's paranoid view—they were deliberately withholding all information on their FTL drive.

Neither Marcus nor I could imagine a third possibility.

When the third option was proposed, Marcus did not believe it. He has never believed it, to this day.

* * * *

In retrospect, the aliens broke it to us slowly and carefully.

First, they brought their three ships into orbit around the Earth, five hundred miles up, and sat there quietly for a week and a half, doing nothing except chatting over the radio and making sure that their mastery of Earth languages was complete. They told us a lot about themselves during that period, and asked for nothing in return but our idiomatic phrases. On the first day we learned that they came from the Tau Ceti system. (Marcus and I had been right on target, though we received little satisfaction from the thought). Day Two they gave us a description of their civilization, with its five populated planets and moons and its links to other, more distant intelligences; all, according to the Genizee, were as peaceful, well-meaning and sympathetic as they were.

The fifth day brought a first look at the Genizee themselves. By that time they had soothed us so well that most people's reaction when they saw a picture of a Genizee was*sympathy* that any rational being had to live with being so ugly.

The sympathy faded a little when the Genizee told us that they lived, on average, for twenty-seven thousand Earth years. When asked if they would make the longevity formula available to humans, they replied, with an apologetic quiver, that there was no formula. The Genizee had always been so long-lived. Almost everyone except Marcus believed them. He was already full of dark surmise.

The bombshell dropped by the Genizee near the end of the second and final week confirmed his suspicions. Asked during a tv broadcast (the world had lived glued to tv sets since the arrival) about their journey to the solar system, they offered an implausible reply. They had not used an FTL drive at all, they said, but an efficient sub-lightspeed drive that allowed them to reach over half the speed of light. They had been on the way from Tau Ceti for twenty-five years. All their journeys between the stars were made at a fraction of lightspeed.

The blue ribbon panel of elderly scientists who had been assembled to interact with the aliens were, if you can believe it,*pleased* by that reply. It confirmed, they said, their own conviction, that faster-than-light travel was a physical impossibility. Nothing could ever move from one point to another, faster than light would cover the distance.

Well, said the Genizee, quaking apologetically, that's not exactly the case. In fact, the reason why we embarked on this long journey to Earth in person, rather than sending messages that you might not believe, or might think to ignore, was just this: Certain of your scientists have been conducting FTL experiments...

No one had looked to Marcus Aurelius Jackson or me for help and advice when the Genizee arrived. Why should they? We were young and junior, without reputation or known accomplishments, and Marcus had already been branded as a crank. Even if we had offered our services, no one would have taken them, or listened to what we might have to say.

That changed in ten minutes—the ten minutes when the Genizee explained that faster-than-light travel was not impossible; that it offered enormous danger and

possible total destruction to any species that attempted it, for reasons that they would be happy to explain to us; that such attempts were being conducted on Earth at this very moment; and that the Genizee had come here with two main goals: to pinpoint the location of those experiments, and to warn the inhabitants of Earth, telling them to cease and desist.

My own immediate reaction was total disbelief, with good reason. If the Genizee had been on the way for twenty-five years, they must have left twenty years*before* we had even the theory for an FTL drive. So they couldn't have started out for Sol just because they'd picked up evidence of what Marcus and I were doing.

It was Marcus himself, no fan of the Genizee, who quickly put me straight on that one. He had long known that any FTL drive would give rise to both*advanced* and*retarded* potentials, similar to those of conventional electromagnetic theory. Both potentials propagated through spacetime, and died out in magnitude—but the advanced potential moved*backwards* in time. The experiments that we had thought to be so secret might be detectable by the Genizee, before we had performed them.

They confirmed his comment later in the same broadcast. They could detect the signal from afar, they said, even as far away as Tau Ceti. But only when they came very close to Earth could their equipment pinpoint an exact*location*. They had done that now. They would be happy to provide that location to Earth authorities.

They did so, and added a few more minutes of stern warning on FTL drives. Half a dozen uses, they said, were often enough to cause "major repercussions" in the region of space.

Having said that, to everyone's amazement they started their ship drives and headed away from Earth.

It was bad for an emerging civilization, explained their departing message as the three ships lumbered off towards Saturn, to suffer major exposure to an older and more advanced one. Now that their warning had been delivered, the only responsible thing for them to do was to leave, and let us humans make our own way. Goodbye and good luck, people of Earth.

I gather that our scientists and politicians went into shock—they had been hoping for free technology from the Genizee, and had received nothing but talk. Marcus and I didn't take much notice at the time, because we had our own worries. Within hours of the last Genizee broadcast, our lab had been closed and was guarded by enough military men to fight a major war. Marcus and I were arrested. We were charged with theft of government equipment, misuse of grant funds, and travel without suitable permits.

Those crimes should not have been enough to hold us in confinement. They were. After what the Genizee had said, no one was willing to let us go free, not because of what they thought we*would* do, but because of what the aliens told them we*could* do.

Relax, said Marcus and I to each other. We can't really be kept in jail like this for more than a day. Can we?

What innocents! We sure could. For the first time in my life, I learned what was meant by a witch hunt. I doubt if one person in a million understood the explanation that the Genizee had offered of the dangers of a faster-than-light drive, but they didn't care. The Genizee themselves had fingered us, so we were guilty. We'd be kept under close guard, without a trial, unless the Genizee returned and said we were to be released.

I myself didn't understand what the Genizee warning was all about when I heard it, but my cell-mate was Marcus Aurelius Jackson.*He* knew what they were telling the whole world—and he didn't believe a word of it.

* * * *

Marcus didn't just explain his views to me. He told the guards, our family members, and finally, after two months of work from me, the three members of the press who could be persuaded to come out to our maximum-security prison in the Nevada desert to interview us.

"A faster-than-light drive needs a tremendous amount of energy," he said to the three reporters. We were all sitting in one room, without bars between us, because I had been working hard on our guards, and finally had them to the point where they thought we might be crazy, but we were surely harmless. The room even had a tiny barred window, with only four guards posted inside, and another two just beyond the door.

"A huge amount of energy," went on Marcus. "The only practical—or even theoretical—way to get that much energy is from the vacuum itself. You have to tap into it."

"You mean, you get energy from nothing?" said the most junior of the press. He had an open, gullible face. The other two, one man and one woman, didn't look even vaguely interested, and I guessed that they thought of the whole trip as a chore they hadn't been able to wriggle out of.

"Not from*nothing*. From the vacuum!" That was one of Marcus's problems, because although it was clear from their facial expressions that this subtle distinction was far beyond all the reporters, he swept right on: "Now, the energy available from the vacuum is so big, you tend to think of it as unlimited. But the Genizee insist that tapping the zero point energy sets up a local stress in space, which ultimately must be relieved. If you remove local energy past a certain critical point, they say, there will be a jump to a lower-energy ground state. The only more stable state is a black hole. The whole region pinches off from the rest of the universe."

"In other words," I said. "The rest of universe will get rid of the stressed region by making it*vanish*." I saw the open mouths, and wondered if I was being as obscure as Marcus. But he had been over this with me again and again, until I had something that made sense to me inside my head. My picture might be over-simple, but the reporters ought to find it easier going. "Imagine that there are a whole lot of elastic bands," I went on, "all over the universe. Somebody starts to stretch one, in one place. That's what we were doing, when we tested the drive. You can stretch it a fair bit, and nothing happens. All the other bands give a tiny bit, and everything settles down again. But if you go on stretching, there finally comes a point where something has to

give. The band breaks. When it does, everything*can't* go back the way it was. You've got snapped elastic, and you're catapulted right out of this universe."

"And that's what the Genizee are warning us about?" said the young reporter.

"They were. But it's*not true*," said Marcus hotly. "When I heard what they were saying, I went back and did all the calculations over from scratch. There's no backlash effect. Spacetime makes a small and quiet adjustment—maybe the local curvature decreases by one part in ten to the twentieth. An FTL drive is quite safe."

"But that means the Genizee were*lying* to us," said the woman reporter, in an annoyed tone. "Are you suggesting that they*didn't* come all this way on those ships? Or that they*didn't* take a quarter of a century to get here?"

"Both!" said Marcus loudly. The guards stirred, and made sure their weapons were at hand. "They were lying about*both*. They didn't come all the way in those ships, and they didn't take a quarter of a century to get here. They came from Tau Ceti—if that's really their home, and they're not lying about that, too—in a big, fast ship, with a faster-than-light drive. They parked the mother ship out beyond Saturn, where we couldn't see it. Then they switched to their slow little ships, and came crawling in the rest of the way to Earth."

Marcus was losing any shred of credibility he might have had, because the youngest of the reporters at once asked the obvious question: "But*why* would they lie to us? What good would it do them?"

"They don't want us to use the FTL drive. They want to bottle us up, here in the solar system. They don't*want* humans out among the stars. I think they're*scared* of us, because we're smarter than they are."

It sounded paranoid, even to me. He was wasting his breath anyway. Even if the reporters believed him, and it was clear to me that they didn't, they would never find an editor willing to run the story. The Genizee, initially repulsive in appearance, had not stayed long enough for humans to learn their possible defects. Their slow and bumbling speech patterns and apparent confusion, which Marcus considered evidence of human superiority of thought, were to most people part of their appeal. The Genizee had become everyone's favorite alien, and you couldn't get away with a bad word about them. The stores were packed with cute little mop-topped black jelly cylinders—although for aesthetic reasons the toys didn't have the disgusting layer of slime that allowed the amphibian Genizee to function out of water.

When it was Marcus Aurelius Jackson against the Genizee, MAJ didn't have a chance. After all, hadn't the altruistic Genizee taken many years of their own lives, just to come to Earth and deliver a warning? And weren't they, even now, creeping back across the lightyears in their cramped, uncomfortable little ships, with twenty-five years still to go? How many Earth people would do something like that, even to save their own closest relatives?*Especially* to save their closest relatives.

So, although Marcus went on talking, I knew he was wasting his time. He wouldn't get one inch of column space or a second of air time for his unpopular views.

As it turned out, I was wrong. "MAD DOG SCIENTISTS UNREPENTANT!" shouted the only headline. And underneath: "Death Penalty Favored For Insane Inventors."

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Marcus is an interesting case for the psychologists. When his idea of a faster-thanlight drive was ridiculed, he redoubled his efforts. And when his just-as-heretical views of the Genizee were pooh-poohed, he at once turned all his efforts from conjecture to possible methods of proof.

"There has to be a way to show that I'm right," he said. "Wilmer, let me try something out on you."

I said nothing. When you are living together in one locked room, it is hard to avoid a discussion.

"Point one," went on Marcus, "According to me, the advanced potential from our test must damp out rapidly as it goes backwards in time. The Genizee say they picked it up a quarter of a century ago, but I say it fades to background level and becomes undetectable in a year or less. If I'm right—and I am—they can't have picked up evidence of our test more than a year before they got here.

"Point two. They say they came from Tau Ceti, and their departure trajectory supports that idea. Even if they didn't, though, they certainly came from outside the solar system. The nearest star is over four lightyears away. Four lightyears or more in one year or less means they*had* to have come using a faster-than-light ship.

"Point three. They left two weeks ago. If they really intend to fly all the way back to Tau Ceti, or any other interstellar destination, in those sub-light ships, they are still in the early acceleration phase of the trip. Even with the most efficient propulsion system I can imagine, it will take them nearly a year to work their way up to half the speed of light."

He stared at me. "Do you see what that means?"

"It means they're still a hell of a long way from home. They're as altruistic as everyone believes."

"No." If the press could have seen Marcus now, they would have felt that their MAD DOG SCIENTISTS UNREPENTANT headline was thoroughly justified. "Wilmer, it means that if they were telling the truth about how they came here, and how they are going back, and where they are going back to, then*anyone with an FTL ship could fly out and catch up with them*. If they aren't where they should be, then they are lying, either about coming from Tau Ceti or about the drive. One lie is enough to discredit everything they said to us. If you ask me, they're already back home, wherever they came from—and I'll bet money it's not Tau Ceti—having a good laugh at the credible people of Earth."

I looked at him, then let my eyes roam around the featureless beige walls of the room. "Let*me* try something out on*you*, Marcus. Point one. There is just one FTL drive in the solar system, and it is impounded, up in orbit and protected by maximum

security guards, because everyone on or off Earth is terrified of it. If they weren't afraid to touch the thing, they'd have destroyed it long ago.

"Point two. There are just two human beings who know how to fly that ship. No one else will go near the *Godspeed*.

"Point three. Those two humans are locked away in an underground room in a building in the middle of the Nevada desert. They have no tools, no friends, no money, and no way of getting to space, still less of reaching the *Godspeed*. Forget it, Marcus, you could never do it, not in a thousand years."

"I know I couldn't," he said. He was still staring at me. I felt a quivery feeling in my stomach, as though my recent breakfast had suddenly been converted to live worms.

"I know I couldn't," he said again. "That's not my line. But you, Wilmer, if you-"

"It's impossible."

"I'm sure it is."

"Totallyimpossible."

"Yeah." He stood up and went over to lie on his bed without another word.

After a few seconds I went across to my own bed, lay down on it, and closed my eyes. I decided that I hadn't been totally honest when I was speaking to Marcus. I still had friends outside, and I still had some equity with them for past favors. I had cultivated our guards, too, drawing a little on Marcus's wealth, to the point where they normally left us to ourselves, but would do the odd paid favor for me provided it was obviously no threat to them or to anyone else. So far as the security around the*Godspeed* was concerned, I had probably exaggerated that. No one would be too worried, as long as it was known that Marcus and I were locked up here...

I shivered, and stopped my thinking right there. What was Marcus trying to make me do? Help him to destroy the pair of us, and the whole of the human race as well? But he had touched that dark, hidden spot where the true ego dwells. Now the live worms in my stomach had crawled up my throat into my brain, and set it on fire.

If we escaped from prison, the alarm would go off at once. The search for us would begin. The two of us would never make it far outside the prison walls, let alone into space, and the guards around the *Godspeed* itself would be tripled in numbers and placed on maximum alert.

But it took only one person to fly the *Godspeed*. And there would be real juggling to be done here, inside the prison, to hide the fact of that one person's escape.

Marcus, then, to pilot the ship and to design the programs that would allow the sort of freeze-frame sequence of hops that the unmanned payload had taken to Mars, searching at each transition for the Genizee ships. I, to stay here, and to arrange matters—how, for God's sake? I had no idea—so that no one knew that Marcus was missing, until he was on his way in the *Godspeed*.

I opened my eyes. Marcus was sitting up on his bed, gazing at me expectantly.

"Any good?" he asked.

"Go to hell." I closed my eyes again. What did he take me for? I had been lying there for maybe three minutes. Extraordinary things can sometimes be done in real time. Miracles take a little longer.

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A "little longer" in this case turned out to be six weeks. Everything had to be choreographed tighter than a five-ship orbital rendezvous. I broke the problem down into discrete pieces, each one requiring a solution if the whole effort were to succeed. Marcus had to escape from here unnoticed. Then I had to conceal the evidence of his disappearance for at least five days. Marcus would need that much time to travel from Nevada, all the way out to the*Godspeed*. Then he had to have credentials that would allow him to board the ship, and he had to remain there undisturbed. After that he would be on his own.

I was prepared for a year-long effort, with a good chance of failure at the end of it. It is a curious fact that my six-week success was possible only because I had been placed in prison. Given enough money, and Marcus had plenty of that, a man can get anything in jail that he can get outside it—plus a whole lot more. Prisons, as I quickly learned, are the natural focal points for any imaginable legal or illegal activity.

You want Marcus Aurelius Jackson to take part in the sensory deprivation experiments now being conducted in this very jail? The external university team responsible for the experiments will be glad to have him. To them, one healthy prisoner is much like another, and the recommendation of the guards is all that they ask. Bringing someone*into* a prison, to enter the sensory deprivation tank in place of Marcus, costs a few thousand dollars. Getting Marcus out in that man's clothes is more expensive, but not much harder.

Not everything is so cheap. You would like a set of forged credentials, showing that you are a Nevada businessman making a trip up to space with a need for commercial secrecy? No problem, except money and lots of it. Many of the world's best forgers are already behind bars, ready to serve you.

The one piece of the puzzle that I couldn't see how to solve would be on board the *Godspeed* itself. Marcus didn't want company on his journey, so somehow he had to arrange to be left*alone* on the ship, long enough to make the first FTL transition.

While I was still pondering that, Marcus was worrying a different issue. "I hope the ship's power plant has been left on," he said, as we were transferring some of his money to an anonymous bank account. "It would be a pain to have to bring all the systems back on-line."

I stared at him. "Thanks, Marcus. That's what I needed."

His new forged credentials showed that he was a specialist in industrial safety, flying out to the *Godspeed* to power-down the ship's dangerous nuclear equipment so that it

would not explode. With that in hand, and a few casual words as he went aboard, it would be difficult to get anyone else to stay within a thousand kilometers.

On the final morning we shook hands, for the first time in our long acquaintance. The door was unlocked from the outside. Marcus left the room, and a man in his twenties wearing a bewildered look and a bad case of acne appeared in his place. Within the hour he had been collected. I wondered briefly if he even knew what sensory deprivation experiments were. From the look of him, it would be little change from his existing condition.

I settled down, to estimate Marcus's progress. Now he would be approaching the airport, dropping off the rented car that had been arranged for him outside the prison and collecting his ticket. Now he should be at the space facility, undergoing a routine physical check that included a DNA identification. He ought to pass that easily—I had rented the best illegal hacker that money could buy, to slot an ID for Marcus into the right computer data bank. Eight hours later he should be ascending to orbit, and four hours after that he would be in an orbital transfer vehicle, on his way to the*Godspeed*.

I kept the tv on, twenty-four hours a day. No news was good news, of course, until Marcus reached the *Godspeed* and could take the final step.

I had plenty of time to wonder if my faith in Marcus was too great. It was one man against the world, his authority against the word of the Genizee.

This morning, right on schedule, the television came alive. Every channel reported the inexplicable disappearance of the *Godspeed*. It was obvious that they had no idea what was happening, since the commentators were worried about the fate of the "safety inspector" who had been on board at the time. Within the hour, I was being questioned.

I saw myself on television, and learned to my relief that Marcus Aurelius Jackson was "in prison, but unavailable for comment." I said that I could tell them nothing useful. I thought that I looked worried.

I was worried. And now, late in the afternoon, waiting for another television interview, I look at my guards and at the afternoon sun streaming in through the bars of the little window, and I am still worried.

Although Marcus and the *Godspeed* left only ten hours ago, they ought to have been back long since. Following the path supposedly set by the Genizee would have taken our ship only a few seconds, even with the brief pauses between transitions needed to drop back into normal space and scan for the Genizee ships. Marcus could have traveled out half a lightyear, well past the place they ought to have reached with their slow ships, and still been back hours ago.

Strange thoughts have been running through my head. Suppose that Marcus found the Genizee ships, and they destroyed him so that he could not return and tell? We had never asked if their ships carried weapons. Then I realize that my thought is totally illogical. Marcus could find the Genizee only if they had told us the truth, and

were lumbering along in their slow ships. In that case, they would have nothing to hide from us.

But perhaps Marcus, having failed to find any trace of the Genizee on the way to Tau Ceti, had decided that they were concealing from us their true place of origin. It would be easy for him to take the*Godspeed* out for a second journey, toward some other probable stellar target. And if that produced no result, he might go out again. How many trips might he make, before he had enough evidence to prove to anyone back on Earth that the Genizee had been lying?

I know Marcus very well. It is part of his nature that he likes to be absolutely sure of things. He will not risk being mocked again. I would settle for one trip out, and rest my case. He might feel he had to make a dozen.

And that leads to another thought entirely. Half a dozen full-scale shots of the FTL drive, according to the Genizee, could lead to "major repercussions" in a region of space.

How big a region? The Genizee were talking of the collapse to a black hole of part of spacetime, with the separation of that region from the rest of the universe. Are we dealing with the collapse of something the size of a ship ... or a planet ... or a solar system? Would the collapse take place violently, or quietly and unobtrusively? And would the *Godspeed* itself be inside that region, or excluded from it? Might Marcus and his ship, left outside, become the only evidence in the whole universe that humans had ever existed?

Those are the sort of questions I am not equipped to answer. I wish that Marcus were here, to assure me that the Genizee were certainly lying, that I am talking nonsense, that I have nothing to worry about. I take some comfort from the setting sun, shining as usual through the little barred window.

But I wish that dusk would come quickly. I want to look for the stars.