

6:00 PM

Philo Farnsworth was again on his front lawn. His neighbors and a few others who knew where he lived were gathered on the street. No news vans. Philo didn't mind. They weren't stepping in his flowerbeds.

At 6:00 p.m. a sphere floated to a position three feet in front of him, to the side so it didn't cast a shadow, and Philo began speaking, heard by most of the planet, or most of the part that was awake:

"Ladies and Gentlemen, it's my pleasure to describe for you what you are going to see tonight. I have invented antigravity, and can control it. This started about thirty years ago, and has reached its fruition tonight. I am very happy to announce the availability of antigravity technology to the world." His neighbors on the street stood in a sort of stunned silence, now making out what this meant. At the launch site the mood was similar, but witnessing the "fruition" of the big hole, they were far more more exuberant.

"The first thing we are going to launch are the ground-to-orbit rocket ships. These are 120 feet tall and will carry 100 passengers to orbit from the ground anywhere on the globe." One rocket lifted from the big hole and hung in the air, three rockets firing a blueish mist from the back. It was silver and sleek, pointed at both ends, bulged gracefully at the center, and at the bottom end, had three hollow bulging tubes. The rockets looked as if they came directly from the 1950's pulp sci-fi magazine covers. "I built these rockets to look good. They will provide easy transportation of passengers and cargo to earth orbit. These are not intended for planetary exploration." The rocket increased thrust, lengthening the plasma cone under each engine and sped vertically out of sight.

"The bluish flames you see projected from the back of each nacelle is water vapor accelerated under about 100 thousand gravities to provide thrust. So though they operate by the force of antigravity, they are in fact classic rockets." Two more appeared from the big hole, and these did not pause. Then six more, then a dozen, then a steady stream of rockets ascended, hundreds the crowd thought. It was 125. It took four minutes.

"Next we will see the launch of the transporters." Small rectangular, glass-walled booths began to ascend slowly. They sped up, out of the way of the fleet of booths that followed. These the crowd estimated at hundreds of thousands. Over the course of five minutes they ascended a hundred at a time and dispersed every direction. "Transporters are intended for terrestrial movement of people and cargo. The small booths you see now are for up to eight people at a time, all going from one location to a single other location, a direct flight, at the reasonable cost of ten cents a mile."

There was a slight hush in the murmur of the crowd, the oohs and ahhs, as everyone did the math in their heads, then a growing applause when they came up with the results. Except for transoceanic flights, this was very cheap. How do we use this?

There was a pause in the narration by Dr. Farnsworth. Something was happening in the hole, judging by the light coming out, but it was below the surface. Over the next minute, everyone waited. The news helicopters saw it first: it was a wheel, over half a mile wide, four large spokes connecting the thick rim to the great hub at the center. It ascended flat, so that the crowd at the launch site saw only a long, curving white wall, growing taller as it rose. It grew to a height of 100 yards then the bottom became visible. As it rose above them, it began to swing to the vertical, and the nature of the wheel was visible to the crowd. A hush fell over them, seeing the enormity of the thing hanging there in the air. The wheel was 1000 meters in diameter, had multiple, Sam guessed ten, decks circling inside the rim, and the hub was open at the ends to create a gaping space where, presumably, the rockets could easily land. The sight was, everyone felt, simply stupendous.

“This is the space wheel Aldebaran,” he said, as the word “ALDEBARAN” appeared on the side of the rim. “It is a place where your children will learn to live in space. No adults will be allowed on the Aldebaran. It will have a six-hour orbit. Schools worldwide can schedule an orbit for classes or even entire grades. Rockets will come to the school to provide transportation to and from the station. We’ll take care of everything. We do not charge for this service. It will be available tomorrow, beginning at 1400 GMT. School principles only can schedule at antigrav.org. We would like all schoolchildren to have two trips to Aldebaran each year.”

There was a thrill and a certain dread with that announcement. Going into space for free seemed like a dream, but kids going with no parents or teachers? Who’s minding them? How will that work? And why no parents?

As those at the launch site craned their necks higher as the great wheel ascended, some noticed a second huge curved wall of another space wheel moving out of the hole. When it was clear of the hole, it, too, rotated into the vertical.

“This is the space wheel Bellerophon.” Again, ‘BELLEROPHON’ appeared on the side of the rim. “This wheel is mine. You’ll notice the hub is larger, the landing bay is taller, and there aren’t as many floors in the rim. Construction of deep space vehicles is the primary mission of Bellerophon. This wheel is invitation only. Bellerophon will orbit quite high, with a 96-hour period.” As Bellerophon ascended, quicker this time, both space wheels began to rotate. By the time they were in orbit they rotated twice a minute, inducing an apparent gravity close to that of earth, depending which floor of the rim you were on.

A third wheel became visible. “This is the commercial space wheel. As yet it has no name. Space will be rented to hotels and restaurants for space tourism. You will pay for the round-trip rocket flight and whatever the hotels charge you. As I said, it’s commercial. Use it as you wish. This wheel has a 4-hour orbit.”

The third wheel ascend to about 3000 feet off the ground, remaining flat to the ground. It would not rise to orbit for a few months, the time needed to build and outfit all ten levels of the initial leases, which turned out to be far more space than most people imagined. Consequent construction took place in orbit.

There were still “oh’s” and “ah’s” from the crowd, but contemplation of hugeness seemed to be settling in. After the booths, the rockets, and the space wheels, they were getting emotionally tired. Those at home were missing out on the scale of the event, and commentators were running out of superlatives to describe what they saw. No one was switching channels.

Those at the launch site said the next event they could hear, but no consensus formed as to what exactly they heard. The spheres were dropping down, and as they “fell” began to light up. The skin seemed to turn from black to silver, and sparkling lights came from the many windows in the surface. From the helicopters warily orbiting it looked like fireworks spread over the crowd.

“At last, ladies and gentlemen, we will introduce to you the robots. These are small spheres which float using antigravity, have a very sophisticated computer controlling them, and are able to do work using a sort of antigravity manipulation beam. These are made to serve mankind, but as you will see, they are not employable as workers, servants or as slaves. But just this once, feel free to ask them to do something for you. I call them Angels, but that’s not really what they are. Calling them Robots is more accurate.”

What the robots were doing was saying “Hello” to everyone there. And not just those gathered at the launch site. Some of the spheres were showing up all over the globe, saying hello in all the local languages and dialects of anyone they could find outside. If you spoke to them, they answered back. Many spent quite some time convincing people who were not watching the events in Utah that they were not ghosts, UFOs, dreams or spirits. They were asked to pick up heavy objects, to move things, to fly patterns, to recite poetry. Many carried on lengthy conversations. One that happened into the Artificial Intelligence lab at the University of Kyoto was put through an advanced version of the Turing test and passed with flying colors, at the top of the “human” category. The researchers in the lab asked for the code driving the AI. They didn't get it.

In just an hour, it was over. “That’s the show, everyone. This is a new era in humankind, and I know you have many, many questions. I’ll try to answer most of them in the press conferences this week. Check the website, antigrav.com, for more information. This is Philo Farnsworth wishing you all a very good day, and a very good future!”

With that, the transmitter went off the air. It was 7:00 p.m..

Things at the launch site didn’t exactly end, however. The robots illuminated the ground as the sun went down, helped people find their cars, were still answering what questions they could, and a few were inventing games with some kids. At about 8 O’clock the petals of the giant hole vibrated, began to move, swung back toward the center and slowly sealed themselves. Robots then rushed in, and “picked up” large piles of dirt and put them back over the petals now covering the hole. A robot would hover over a pile, then rise up with maybe two tons of soil and sand suspended below it, as if attracted to a magnet suspended below the robot. From a distance it appeared as if the soil of its own accord decided to move bit by bit into the center of the ring left by the opening petals. That sight alone kept many there at the big hole for the rest of the night, hoping to see more miraculous.

Sam Davis hadn't moved. He was dumbfounded by the entire experience. An engineer by training and profession, his mind whirled at the implications of what he'd seen, particularly moving the dirt. One of his ATV-neighbors hadn't left either. "What just happened here? Do you know?" he asked.

"This guy Farnsworth can control gravity, and he has robots that can control it too."

"What's that mean? How does he do it?"

"I can guess what it means, but I have no idea how it's done. I hope he'll tell us this week. What it means is that a lot of things are going to be easy that used to be hard. Take those transportation booths. They can fly anywhere you want and take you anywhere you want to go. He said the cost, ten-cents-a-mile. That's cheap travel. I mean, it's cheaper than anything but free. He didn't say how long it might take, though. Maybe it's too slow to be of much value, so the price is low. But it's the convenience that you factor in. That's work a lot."

"Convenience?" the neighbor asked.

"Think about traveling by car. You need to stay on the roads."

"Not out here we don't!" his neighbor laughed.

"Cars do. Staying on the road means you get to your destination by following them, turning to new roads, taking a longer path than you need. Booths don't need roads. They can fly up and above the city, taking a direct path. That's a lot less travel time. You'd be amazed how much travel by car is spent driving the wrong way, waiting for lights, stuck in traffic. About 60% of travel time, in Chicago, is spent doing something other than getting closer to your destination. If you can save that time, it's valuable. Much more valuable than ten cents a mile. In Chicago, or any big city. Less in rural areas, I imagine, but still valuable.

"One thing, though," Sam continued, "the booths can't hit each other. That's a real danger, in the large cities. So many people moving, either you need to consolidate passengers and booths into larger groups, or you need some real organization up in the air to prevent collisions. Just look at the situation with aircraft. Aircraft are so numerous in the air that radar has lost its value in keeping aircraft separate. What they do now is to have every aircraft broadcast its location, direction of flight, altitude, identity, all kinds of information, and they listen to all that data from other aircraft at the same time. Computers on board sort it out and create a map. Generate warnings when there is danger of collision. The air controllers on the ground use the same broadcasts to make a map so they can depict the airspace accurately, and they can issue commands to keep aircraft flying safely. Something like that could work, but the airspace over a city would be very congested. Difficult even for an automated system to keep everyone safe." His audience was getting fidgety. Sam switched topics to something he thought might resonate better with his neighbor.

"Take farming. This could change farming in a big way. Where do farmers take their harvest?"

"Take most of it to the co-op. Some we save for seed."

"How many tons?"

“Well, let’s see, 45 bushel an acre in a good year, say a feller has a thousand acres, 60 pound a bushel...ah, that’s...uh...”

“Something short of three million pounds. About fifteen-hundred tons! That can be shipped over the roads, one trailer-full at a time. But what if they could build transporters for grains? You could get the harvest to the co-op in one big load! No more worry about trailer weight and road limits! You load it up and the thing floats over and dumps it in the silos. Or you could sell directly to the buyers of your harvest, cut out the middle man, increase your profit.

“And what about tractors? Maybe they can build them without wheels. No more getting stuck in the mud in a wet year, needing other tractors to stop what they were doing to pull you out. If they can pull the loads. That I don’t know. Maybe. Maybe someone will ask at a press conference. So many questions! My head’s buzzing with them.”

The farmer nodded. “Dang,” he said after a pause. “Well, good luck with that head of yours,” his neighbor said, as he started his ATV. “I’m getting home. So long!”

Sam sat on his ATV for a while more, thinking. “Everything’s different now. I hope Farnsworth knows what he’s doing. Lord I hope he knows. Exciting times. And so many questions! Maybe I’ll go to some of these press conferences, see if I can get in.” Sam started his ATV, and began the long series of trails back to his car and trailer. He drove under the third space wheel, still hanging in the air, occasionally stopping for a spectator standing in the trail, staring straight up. It felt eerie being under such a huge thing. Sam didn’t sleep easily that night. He gave up about 2 am, got up, and began writing out his questions. He could nap tomorrow.

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