

Paying for Mars

written by David Ellard on December 27, 2002

Thirty years ago this week, Gene Cernan took the dubious distinction of becoming the last man to have walked on another world. He and geologist Harrison Schmitt (The first and last Scientist on another world) ascended from the moon's dusty surface with the realistic belief that while this was the last Apollo mission, men would soon ultimately return to exploring the planets.

Mars was the obvious next step. After the Earth, it's probably the most likely place to find life in the solar system, and has all the resources needed to support long term human habitation. So where did we go wrong? How can we be stuck in low Earth orbit thirty years after landing on the moon?

We have the technology to go to Mars. That much is certain. When JFK, in the early sixties, declared that the US should go to the moon, no American had ever actually been in orbit! Today, going to Mars isn't as daunting as the moon seemed in the sixties. We know all we need to send people there, and we've had thirty years to establish, at least on paper, a plan to do just that.

Mission plans, such as Robert Zubrin's Mars Direct, show us how to utilize the Martian atmosphere to produce fuel, cutting down dramatically the size and complexity of a mission, while actually increasing the safety and productiveness of the journey. In 'The Case For Mars', Zubrin shows us that there is nothing holding us back from the red planet. All the technological issues have been solved. We are ready to take the Martian challenge.

The quote, 'No Bucks, No Buck Rogers', was coined at the beginning of the space age, and even today it remains true. The only thing stopping a manned mission to Mars is simply the money required to do so. A Mars Direct style mission was estimated to cost twenty to thirty billion dollars for a government or less than five if a private company makes the attempt. Neither sum is a small amount of money, and the obvious reason that no one has actually gone to Mars so far is because there will be little initial return on this investment.

But what if there is another way. What if we can make going to Mars a profitable venture?

I propose something called Sell-Mars. The way it works is simple: a non-profit organization is established to administrate the sale, marketing, and ultimate colonization of Mars.

If the planet were sold for \$10 an acre, it would be worth 350 billion dollars, a hundred times more money than we need.

Any person, government, or private company may be a part of Sell-Mars, but we aren't just a cosmic estate agent. For \$1000, you could have your own small Mars rock delivered to your door. For varying amounts, you can name the mountains and valleys the first explorers discover. A billion people watched the Apollo 11 launch. That's a big advertising market. How much would Coke or Pepsi pay to paint a rocket tank to look like a giant soft drink can?

Maybe your country can't afford their own mission, but for five million we'll plant your flag in the Martian soil. Perhaps your country might like to send its own astronauts and scientists to Mars. Simply sponsor them for fifty million each. You only pay for what you can afford. For private citizens, it may only be a few dollars. For multinational corporations or governments, it may be millions, but regardless of how little you spend, your name is sent to Mars on a CD. Anyone who wants to can become a part of history.

But of course we don't own Mars. This organization would have to land there in order to have any sort of

claim, but how can we sell you land and Mars rocks before we get there?

Which came first the chicken or the egg?

The only way to pull this off is with a little faith. Yes, this is the catch. People must buy the land and rocks before we even launch the first rocket. Most of you at this point are screaming scam, there's no way we could guarantee the investors money, and this is true. We may never raise enough money, or the rockets could blow up on the pad, we could never actually give people a 100% guarantee that the money they send us would return as Mars rocks, or a legitimate land deed. But we could go partway to satisfying their concerns.

For example, say you want to risk it and be a part of Sell-Mars. You only buy an acre of land. It's only \$10, so you're not particularly worried if the whole thing fails. Your money, along with everyone else's is deposited into a secure bank account where the money just sits and waits. You see, Sell-Mars cannot touch it until it reaches a certain level. Let's say one hundred million dollars. The interest from that money is used to snowball the whole scheme. It's used for advertising, to let people know what we're all about and how they can join. But until the bank account reaches the hundred million dollar level, your \$10 isn't touched.

Two things can happen here. The first is that we never reach our goal. No one in the world is interested enough to spend a few dollars on a crazy scheme. Colonizing a whole planet just isn't a priority for us as a species and the whole project is cancelled, in which case the money in the bank account is returned to you, untouched. No one loses.

But say for example people are interested in going to Mars. Say the world gets inspired by this, and wonders if we really can do such a thing. If the money gets past the cut off point, your \$10 is ours and it's committed to Mars. The first thing we do is start designing and building our own rockets, a cheap, expendable booster that we mass-produce. We will test this rocket hundreds of times by launching satellites, proving the rockets reliability, and making money for the Mars fund at the same time. More money will be spent on an advertising blitz, the likes of which the world has never seen. Every major advertising medium will present our plan. If the world wants to go, they'll have the chance.

As I mentioned before, a Mars Direct style mission could be accomplished for less than five billion. Five billion dollars isn't pocket change, and even when the ball gets rolling we might fall short, in which case any profits from launching satellites or space tourists will pay off our investors.

But is five billion really that much? At least thirty billionaires could pay for it by themselves, or if the whole world chips in, it's less than a dollar per person. Several corporations could afford five billion from profits alone. If every country in the world split the bill, it would only amount to twenty-five million each.

But of course none of these are valid options. I don't expect Bill Gates to pay for it all himself (but if he's smart, he'll invest in some land). Sell-Mars will work only with the combined efforts of the general public, business, and governments. By setting ourselves no limits, by utilizing every moneymaking scheme we can think of, from muffin drives to movie rights, we should reach our target.

Here are just a few examples of Sell-Mars ideas.

Selling land on Mars. (\$10 per acre, or \$100 for 100 acres)

Selling Mars rocks. (price dependent on size)

Selling the naming rights for Martian geographical features.

Selling the broadcast rights, movie rights, and a reality Mars TV show.

Planting your country's flag on Mars. (\$5 Million)

Martian astronaut sponsorship. (\$50 Million)

Tourist flights into orbit. (\$10 Million)

International lottery with the prize being a trip to Mars.

Auctioning off the rights to examine the first returned Mars rocks.

Auctioning off the rights to name the first Martian life.

The first mission will launch to a worldwide audience of billions. This is a rare advertising market, on par with events like the Olympics, so major corporations can advertise to the world and show their support for Mars.

After the launch, the astronauts will host a weekly reality TV show, of life in space, and the exploration of Mars. Permanent cameras will be mounted to the astronaut's suits, allowing viewers back home to experience Mars along side the astronauts.

The first astronauts will plant a red United Nations flag in the Martian soil. They will claim the planet for all the people of the Earth, to be administered at first by the Sell-Mars organization, and later by a fully autonomous Martian government. Please don't assume that we're claiming the planet for ourselves only. While the land that we have sold will be legitimately owned by the people who bought it, it will only amount to less than one percent of the surface. There's plenty of room for all. If anyone else wants to mount their own mission to Mars, they're more than welcome to it.

The first explorers, by landing on behalf of all the people who invested money in the plan, will have the right to claim a few percent of the planet, and so the land deeds will be therefore valid. I imagine that the land will rise in value after it has been claimed, as it will now be legally recognized.

As the astronauts spend a year traveling around Mars, they will no doubt have to catalog many mountains, craters, valleys, and other features. The digital camera's they carry will send back pictures to Earth, so John Smith, who paid to have a mountain named, will get to see his investment.

In a year the astronauts will have plenty of time to explore and carry out experiments on the Red planet. They will also examine techniques vital to building a sustained human presence on Mars, the ultimate goal of the project.

After the year is up, they will leave for Earth, carrying with them as much Martian soil and rocks as possible. Six months later they will splash down to a hero's welcome, and then probably spend another six months doing promotional tours and book signings. All profits would be injected back into the program.

The Martian rocks will be studied by the universities and organizations which secured the first examination rights. Once they are found to be free of any Martian life, and are no use for further research, the small rocks and dust will be distributed to the customers who previously purchased them. Several larger rocks will be auctioned off. Again the profits will go back into the program. (A fist sized Moon rock was valued at 350 Million dollars!)

There will probably be three to four initial exploration missions to Mars, but after these the program will change slightly. Instead of returning the astronauts home, the next visitors to Mars will stay there, and begin the establishment of a new civilization.

We could never seriously hope to pay for the colonization on our own. But luckily we shouldn't have too. After

the initial exploration missions, people will be able to purchase a one way ticket to live on Mars. With our hardware being mass produced, and a cycling space craft traveling to and fro between the Earth and Mars, the first colonist's will probably pay around a million dollars for the journey. While that's not a sum of money that most people could afford, the majority of the first colonists will be scientists and engineers who could be sponsored by universities and other organizations to conduct legitimate scientific work. Even with ticket prices this high, many private citizens could afford to make the journey from the old world to the new, especially considering that with a one way ticket to Mars, a person could sell his house, car and other possessions.

At this point in the colonization, the Sell-Mars organization would make a small profit of each ticket sold. This money would be reinvested back into space, for whatever scheme seemed appropriate at the time. It may be a new cheaper launch vehicle, or a Sell-Moon scheme. In this way, our expansion into space would be a continuous event, and we should never again fall back to the cradle of Earth, as we did after Apollo.

My father, like so many of our ancestors, traveled from the old world, to the new. The journey for him was comfortable, but many people who took the journey a hundred years ago had a harder time. The trip took six months, with poor food and cramped conditions, but the goal was worth the discomfort. By leaving the old world, they were starting again, a fresh start in a new place with unexplored lands to be utilized and new societies to be created. Australia, Canada, New Zealand, and the United States were all colonized from the old world, and now rank among the leaders in wealth and living conditions. The reasons are simple: a new colony must at first struggle to survive, but this struggle leads to ingenuity and progress. A new colony must be flexible and inventive to cope with the demands of a developing nation, leading to modern views of government, and society.

This trend can be seen throughout history. From humble beginnings, along a thin strip of vegetation in Kenya, Homo sapiens has spread throughout the world. Our constant struggle with this expansion has evolved us into intelligent and self-aware creatures. But a new frontier was available for our forefathers. My generation does not have that option.

We are the first generation without a frontier.

The task of opening up the new frontier is ours. We are the first generation without a frontier, but we can still remember what that means. We still have some of the drive that pushes us to explore, to expand. If we leave this to our children we run the risk of them having forgotten the frontier spirit. We risk them always passing the challenge on to the next generation. We risk cloning generations of apathetic explorers, eager to discover in theory but never in practice.

Mars is there for all humanity, but it is all of us who must be there for Mars.

Works Cited:

- 1) Zubrin, Robert And Wagner, Richard. The Case for Mars: The Plan To Settle The Red Planet And Why We Must. Touchstone: New York, 1997
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