

# 05 – A Turning Point in Human History

## SUMMARY

This chapter makes the case that a permanent lunar base represents a transition point in human history. Starting with the Initial Permanent Crew, humanity will start to spread beyond Earth first with the permanent bases on the Moon and Mars. We will know that we are watching history being made.

## HISTORY IN THE MAKING

We are approaching a point in time that could prove to be very historic -- at the level of Christopher Columbus or Plymouth Rock. The moment that humans began moving beyond Earth will be looked back upon as when it all started. We are all very privileged to be living at this time.

Those older space advocates who have been working towards this day can take comfort that they lived long enough to see the picture emerging of how large, off-Earth development and settlement will happen. For those of us too young to remember the amazing Apollo Program, this will be our moment. And what a moment it will be. Neil and Buzz walking on the Moon was truly amazing. But how much more amazing will it be to witness the first humans selling their homes and beginning settling down beyond Earth!

### **A Historic Moment for All of Humanity**

America has a space budget larger than any other in the rest of the world and a couple of American companies are well in the lead in developing fully reusable heavy lift vehicles. So, America will lead in the establishment of large, permanent bases on the Moon and Mars leading to settlement. But because of the rapidly dropping launch costs, many other countries will be able to follow America's lead. So, other countries will likewise point to the near future as the time when they send some of their citizens to represent their own people in new branches of humanity.

### **The Historic Significance of the Starship Fleet**

SpaceX is developing its Starship super heavy lift vehicle in Boca Chica, TX and has constructed a factory positioned to crank out a fleet of these vehicles once they become reliable. This capability makes possible

the turning point in human history where humanity first begins moving beyond Earth. Each Starship will be able to transport perhaps 120 people to the Moon at a time. Given a fleet of hundreds of Starships each completing round trips in less than two weeks, one can imagine an international base growing rapidly into the thousands and from that infrastructure foundation, a private settlement becomes possible. It all depends upon the capacity and frequency of the Starship flights and the per-seat and per-kg costs. And this is where the Starship really shines because it was specifically designed for this very thing.



*Star Factory in Boca Chica, TX.*

## **CHOOSING TO WRITE HISTORY**

The goal of the Apollo program was to land astronauts on the Moon and to safely return them to Earth. People walking on the Moon! How amazing is that? And that is exactly what happened. No doubt those working on the Apollo program understand that those first steps on another world and the words spoken would go down into history. Words such as:

**President Kennedy** - *"We choose to go to the Moon in this decade..."*

**Neil Armstrong** - *"One small step for man...one giant leap for mankind".*

When we return to the Moon, will it be history making or just a ho-hum repeat of something that happened over 50 years ago? Well, it all depends upon how we do it.

Just like, during the Apollo Program, we can and will know that we are writing the history of when humanity began to spread beyond Earth. This book describes how we can write that history by how it is conducted, especially the Initial Permanent Crew phase. And it ought to be conducted in such a way that parents in the future will have a clear and positive story to tell their children.

It would be disappointing if we were to muddle forward without intentionally thinking about writing history the best we can. Imagine a history where there were some government astronauts picking up more rocks to add to the Apollo collection, and then some more astronauts arrived, and then there was a small base with astronauts spending increasing time on the Moon, and then at some point, a private individual arrived but then returned after a few weeks, and then someone stayed for an extending time. That would make an indistinct story that future generations would have a hard time relating.

Rather, the story proposed in this book is that, early on, there were specifically eight private workers that sold their homes on Earth and were the first of humanity that moved beyond Earth. We would know their names, their backgrounds, their jobs, and their personalities. We could relate some of the amazing firsts that they did like the time that two of them did an amazing dance performance in 1/6th gravity, and how these eight people set the stage for the International Base where the nations of the world began sending their representatives. This is the historic prize to be seized, IF we choose to do it in such a way that would be amazing and memorable.

## **PRIVATE WORKERS FROM THE START**

The key to writing a truly historic program comes from the true understanding of the term "settlement". Fundamentally, settlement is when one settles down, meaning that one is establishing a new home there.

Setting down means establishing one's permanent residence. If one has a family, then one is living with one's family with the simplest form of family being a couple. Settlement also requires that it goes on to become a larger community. This is why 1607 (Jamestown) is cited as when the English settled North America and not 1587 (Roanoke) because the latter disappeared and so never became an established community.

It is generally agreed that off-Earth settlement should be a private matter and not government in nature albeit there could be a partnership. It should be noted that, from a technical standpoint, a government base and a settlement are nearly identical. In both cases, one needs: power systems, permanent habitats, life support, growing food, and mechanisms to utilize local resources. Whereas private individuals settling down can constitute a settlement, a government facility where the residents are only living there because of the job means that a government base is just that, a base (or outpost) but not really a settlement.

Because of the historic significance of people settling down off Earth, it is here proposed that the first settlers be a handful of individuals (i.e. Initial Permanent Crew of eight) working for a private company that has a contract with NASA for its Crew to conduct a set of demonstrations of use in a follow-on American base as the first habitats of the International Lunar Base. So, whereas ultimately the funding comes from NASA, the company employees can be considered private workers and hence the first humans to begin settling beyond Earth.

During the Initial Permanent Crew phase, the focus should be on those eight people. So, even though we would, at that time, have the capability of landing crew on the Moon, we should hit the pause button and deliver only cargo so that the story that the people on Earth are watching for six to twelve months is only the story about these historic crew. But the cargo deliveries could include the first habitats of the International Lunar Base (ILB). Then, after the Crew lives out the story, American and other astronauts will start arriving, be greeted by the Initial Crew and then start setting up the ILB and conducting missions of lunar exploration. The private, Initial Crew would remain until other private individuals (paying their own way) start arriving to grow the private areas of the base.

So, the historic story will be about that Initial Permanent Crew, what they did, and then how American and astronauts from other countries began arriving. It would include how the countries worked together to establish an international base while extensively exploring the Moon. Later, private individuals arrived and as their numbers grew, they began establishing small settlements (colonies) in the polar areas and eventually settled territories around the Moon. Chapter 16 goes as far as to describe how continued growth of people groups on the Moon will likely lead to the establishment of independent settlements with self-governance perhaps one day resulting in fully independent countries.