

16 – From Base to Lunar Countries

SUMMARY

Looking out to the 2040s, we can anticipate that, as people groups start setting up their own colonies, thoughts will naturally start moving toward the idea of self-governance. To prevent future border conflicts, inspiration can be drawn from the Northwest Ordinance Act to pre-draw borders and set criteria for a vote of independence after reaching a certain population size. It is unlikely that anyone on Earth will take physical action to stop self-governance and so it will happen.

Undoubtedly, any Plan for lunar settlement imagined at this early date will have to change when confronted by reality. But the attempt to figure out how things will probably play out is useful for two reasons:

- It inspires people with a vision of what is possible,
- It serves as a reference point to help planners think through the relevant factors.

The Plan laid out here is based upon the idea that there are natural factors which will drive the direction of development. Being natural, we may be able to understand how they will likely play out.

THE INITIAL BASE

Most everything starts small before growing large. A lunar base will be no different. The first habitat will likely not be a specialty hab but a general hab in which all of the major functions would be provided within a single habitat. This could be either the StarHab or the InstaBase.

These pages argue that the Initial Crew should be private workers for companies in a public-private partnership with NASA. These crew would help establish the infrastructure needed for the following phase -- the International Lunar Base.

THE INTERNATIONAL LUNAR BASE

US Habitats

Even during the Initial Permanent Crew phase, cargo landings will still be occurring including very large inflatable habs and equipment which will constitute the beginnings of the International Lunar Base.

With NASA having the largest space budget in the world by far, the initial habitat would probably be followed by several large US habitats consisting of some of the most foundational specialty habs. These would be habs such as the DormHab, (life) SupportHab, and StorageHab (with food supplies prior before food is grown. American astronauts would arrive, move into the initial base habs and then, from those, continue to receive and set up more specialty habs. Astronauts from allied (e.g. ISS) countries would start to arrive and set up those specialty habs designed by their countries.

Specialty Habs for International Astronauts

This phase is the main phase in which a permanent base becomes reality. The pages dealing with the International Lunar Exploration Phase goes into some detail showing that most all countries could afford at least one seat on a mission of lunar exploration. The result is that somewhere around a thousand, highly-trained international astronauts could populate the growing international base. It is during this phase that most of the specialty habs would be set up and adjusted until they work well.

It is proposed that the specialty habs not be developed directly by the countries but that the countries would fund their companies to develop their specialty habs but that companies from other countries developing competing habs wither the same function. In this way, there will be competition on both price and quality thereby reducing the incremental costs as private settlers start arriving.

An international base would also need to have clarity on certain governance issues, and the reality of a coming, permanent base would give the specific push necessary to get people to finally make decisions regarding off-Earth property rights, resources, and eventually, political independence of future colonies. I have doubts that these agreements will necessarily come through some United Nations committee but rather would be intergovernmental agreements like the ISS agreement or a follow-on to the Artemis Accords.

National Sections

Retirees will undoubtedly make up a disproportionate percentage of the initial private settlers. These older people may find it difficult to learn the common language (i.e. English) of the international base. For this reason, we can envision language-specific sections of the international base developing in which different languages are commonly spoken in different areas of the base. Advanced language translators will help with communications but for everyday conversations, people would rather not have to constantly go through translation. These linguistic, national, religious, and philosophical sections would lay the foundation for small, separate colonies probably located in the polar region, but within easy driving distance to the International Lunar Base.

POLAR COLONIES

The south lunar pole has hundreds of square kilometers of areas with increased sunlight throughout the lunar day. About 13 distinct areas have been identified each having areas of increased sunlight and with nearby permanently shadowed craters potentially having elevated concentration of ices. Colonies in each of these areas would probably still be connected to the international base and to each other via compacted dirt roads, covered tubes, or even rails. These colonies could grow as large as tens of thousands of residents with sufficient space, water, organics, and other resources from the local region. Access to local volatiles may be considered a constitutional right for the colonies (the right to life).

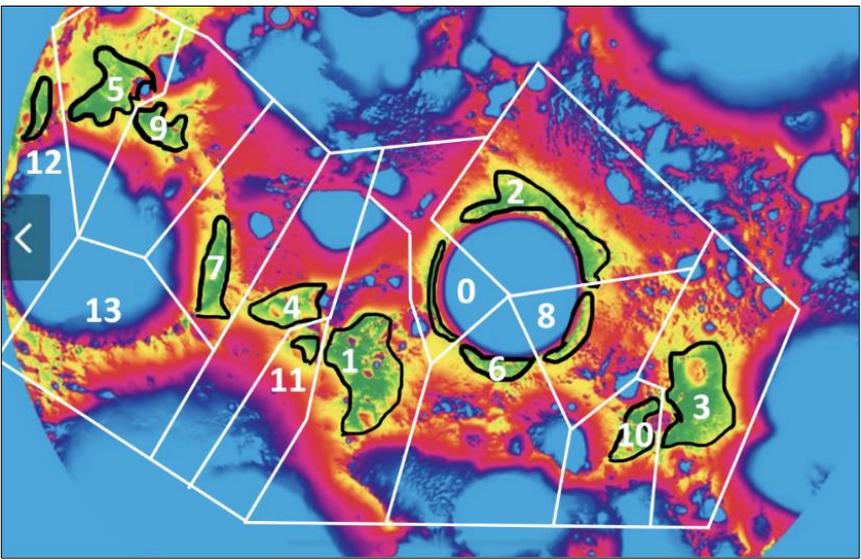


Illustration of polar areas containing both high sunlit areas and PSRs.

TERRITORIES & COUNTRIES

The term "territories" is used to describe pre-defined areas of the Moon that could, one day, become an independent lunar country. If there are no boundaries pre-drawn for colonies at the poles nor boundaries pre-drawn in the rest of the Moon, then people groups could grow up intertwined with each other and future border disputes could arise. America's history of how it handled the Northwest Territories demonstrates a rational and peaceful way of establishing future, political entities. Before different people groups start settling on the Moon or Mars, we need to have enough foresight to realize that, one day in the future, where borders are drawn will be a significant issue. It is best to prevent conflict then by establishing boundaries now while there is little at stake.



The Northwest Ordinance.

Whereas the Outer Space Treaty (OST) prevents signatories from claiming property for national sovereignty, it is unreasonable to believe that, in the future, people living on the Moon or Mars will never wish to become politically independence. They will. And when they do, those new political entities will not be signatories of the OST and so it would be entirely reasonable for them to claim sovereignty over the land that they reside on. It is also unreasonable to believe that countries such as the United States will be so opposed to people on the Moon (many coming from the US) issuing their own Declaration of Independence. Will the US boycott supply launches thereby resulting in their deaths? Will the US send the marines to stop these moves towards independence? Not only would the US not do any such thing, but they would also welcome their compatriots deciding to become independent branches of humanity spreading common values beyond Earth.

It is impossible to determine with exactness what those countries might be. But it is reasonable to guess that they might be based upon the same factors that people group themselves on Earth including: linguistic, national, religious, and political differences. It may be that countries on the Moon or Mars will arrange themselves into a federation in which they govern themselves and yet have some body representing all the people on the planetary body.

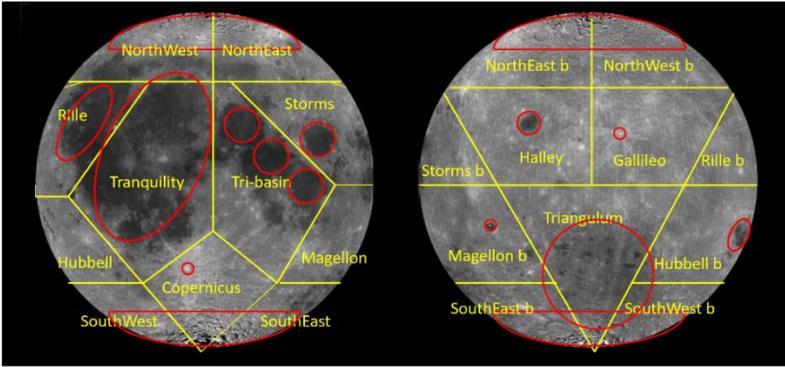


Illustration of pre-drawn territorial borders on the lunar front and back.

Repeat on Mars

Whereas few point to the Martian poles as the logical starting point for Martian colonies, most of everything else would follow similarly to how the colonies play out on the Moon.

ESTABLISHING BORDERS

It may be that UN agencies will be unable to develop sufficient consensus to propose future borders on the Moon and Mars. But perhaps an international, self-appointed group could be the first to identify proposed borders. An example of something similar is the Geneva Convention setting standards for how war was conducted. It was first established by the non-governmental International Committee of the Red Cross. But those standards were so useful, they have been broadly adopted internationally as customary law to where countries who haven't signed the Geneva Conventions are nonetheless held to them. Until anything better is established, the suggested borders will remain as the only ones proposed.



An international committee proposing borders.

