



## Beatrice Spreadmoore's **Financial World**

### **A Moon Base And a possible 51st state**



#### **The proposal**

In a recent debate "Gingrich promised that "By the end of my second term, we will have the first permanent base on the moon and it will be American."

He said the development would include commercial and private efforts, and will make apparent, "we clearly have the capacity that Chinese and the Russians will never come anywhere close to us." Gingrich also said he would push to develop propulsion technology that would get man to Mars. He emphasized that it doesn't have to be expensive, exploration in partnership with private companies can lower the cost. Wants to offer \$1.8 billion prize monies taken from the NASA budget to spur innovation.

This is not the first time this idea has been floated.

In **1981** Gingrich previously advocated the formation of a permanent manned lunar base by 2020, and tried to introduce legislation for the **Northwest Ordinance** for Space, that would enable the moon colony to become the **51st state** upon reaching a population of **13,000 residents**. The colony concept was called an "ambitious goal" by those who criticized its reliance on the private sector which has been unwilling to solely fund such exploratory efforts.

In **2004**, President Bush called for a return to the moon, followed by Mars expeditions. At his request NASA came up with the Constellation program. Two years later, the space agency unveiled plans to build a permanent moon base within 20 years, which could be used as a launch site for future missions to Mars.

Over the years that the Constellation program was being designed and discussed, however, NASA's budget did not increase in any significant way to develop the required technology. Technology will not be the problem. With the right investment, America's scientists and engineers could easily get the job done. In **2008** President Obama also hinted at a new path for space while on the campaign trail..

#### **The cost**

The major issue today is the same as it was in 2004: where will the money come from?

Mike Griffin a NASA Administrator and chief architect of a plan to return humans to the Moon estimated a cost of about \$200 Billion. Other estimates significantly exceed this number.

## The benefits

There are good scientific reasons for such a base. NASA's plan was that, by 2020, four-person crews would make week-long trips while power supplies, rovers and living quarters were being built on the lunar surface.

In the mid-2020s, when the base was fully-built, people would stay for up to six months at a time to prepare for longer journeys to Mars. By the end of the decade pressurised roving vehicles could take people on long exploratory trips across the lunar surface.

**Scientific:** There are many things we could do from the Moon. Better astronomy and astrophysics. A few years ago, NASA put out a list of [181 things to do on the Moon](#).

**Economic:** There's potential on the Moon, especially in terms of [mining for resources](#). In particular, the Moon is a source of iron that would be much easier to process, and it's also an abundant source of Helium-3, which is rare on Earth but could fuel clean fusion reactors.

**Innovation:** Lessons learned on the Moon could prove critical in solving problems on Earth. Because of the cost involved in transporting items to the Moon, a Lunar colony would have to be self-sufficient. So the innovation and solutions that come from solving the problems of self-sustainability could be applied to Earth in terms of recycling waste products, energy efficiency, better solar panels.

## The practicality

Since 1961, when President Kennedy put forward plans for space exploration and trips/bases on the moon each succeeding president and many presidential candidates have entertained the idea.

In the current presidential race candidate, Newt G., has gone off the rails with his idea that a permanent moon base should "be American and possibly the 51st state" That's absurd. For one thing, building a base would be too costly for any one nation as has been demonstrated by plans put forward by several recent presidents. The military prospects of one nation owning the moon is also a terrifying thought.

It makes more sense to spread the costs around, like the International Space Station. Also, and most important, the exploration of space should be a human adventure. Perhaps the most important factor is that nations working together are less likely to militarise the moon.

Russia is looking to revive Cold War era plans for a moon base. But, realizing that the cost for such a venture runs into the billions, probably the tens of billions, they have decided to approach NASA and the European Space Agency for a joint project. NASA has plans to set up a permanent base for astronauts on the moon by 2024, the first step in its plan to resume manned space exploration. The South Pole is the planned base site; good for collecting solar power, has resources that can be mined.

With recent deposits of [water](#) found on the moon, the moon has suddenly become a good spot to build a station that can be a step to the stars. And while it probably does not have as rich a selection of metals and compounds as the Earth does, it could still become a major manufacturing point for critical supplies, like oxygen. There are materials on the moon such as "lunar concrete" which could be produced at 1/10th the cost of concrete on Earth.

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## Summary

Rejecting the ridiculous notion put forward by Gingrich is just common sense, but considering the damage we are contributing to the Earth's climate the cost of not advancing science, medicine, and technology in

order to enhance our chance of survival seems ludicrous. We have seen over and over that war-time and space exploration scientific and technical advancements have been invaluable. What better way to bring the world together than projects that can capture the imagination of people everywhere and instill a sense of pride in what we can accomplish.

## **Field Trips**

[Cooperative plans for a Moon Base](#)

[Developments in the Space Industry](#)

[NASA' Moon Base plans](#)

[Using materials from the moon to build a base](#)

Happy Trails,

**B.S.**