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THE BLUE MARBLE: A SYMBOL FOR A SUSTAINED EXPLORATION OF SPACE IN AND BEYOND LOW-EARTH ORBIT.

Abstract

As humanity prepares to extend its reach beyond low-earth-orbit for the first time since the late 1970's, a new symbol of international cooperation is needed to further promote the message of peace and collaboration such exploration entails. The "space race" that occurred between the Soviet Union and the United States of America is a model not suited for long-term, sustained space exploration. It was too costly and too resource-intensive for a single nation to bear. While competition is healthy for technology development, the success of a sustained space exploration strategy lies beyond technological capabilities. It lies in international cooperation, space policy, and most importantly public support. Without these, no program can realistically achieve a sustained presence in space beyond low-earth orbit.

Today, some forty years after the end of the cold war, space development is still considered a strategic asset. Technological achievements by one nation are often viewed as threats by others, as recently expressed by the satellite-destroying missile demonstrations by two super-powers. If history is a witness, a "space race" between those two nations will not benefit humanity in the long run. Through historical illustrations from the Apollo and Soviet/Russian space programs, the structure of the European Space Agency, the more recent Chinese space activity, and recent ventures in space commercialization, I show that space exploration has all the assets for truly becoming a beacon of light for human unity despite a conflict-torn planet. Keeping the public excited and stimulated is a key ingredient to a sustained success, which may even lead to overcoming current political and legal barriers that exist in technology transfer.

To this effect, this paper proposes a cost-effective first step in the addition of a universal symbol which, placed along-side national flags commonly displayed on hardware and astronaut/cosmonaut flight-suits, would send a strong message to the world that space exploration is done for the benefit of humanity as a whole, not just space-fairing nations. It is a symbol that does not require political collaboration between space-fairing nations, yet is a symbol that anyone, anywhere in the world can relate to it, regardless of nationality, ethnic origin or religious beliefs.

Astronauts/cosmonauts, or national space-agencies venturing in manned or unmanned vehicles in and beyond low Earth orbit are acting as ambassadors of planet Earth. The "Blue Marble", the first complete picture of Earth taken from space by humans in 1972, fits this universally appealing symbol. Placed on the shoulder pads of astronauts/cosmonauts, or prominently displayed on space-bound hardware would send a universal message that at least in space, our planet is working together for the benefits of everyone. What a message for the younger generation growing up in a global society torn by conflict.