

International MoonBase Alliance: Goals and Update

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Abstract

The International MoonBase Alliance (IMA) is an international non-profit organization, uniting leading scientists, educators, and entrepreneurs from space agencies, academic organizations and industries worldwide to advance the development and implementation of the work needed to make humankind become a multi-planetary species. IMA's first major project beyond the Earth is to build an international base on the Moon called Mahina Lani – Hawaiian for Heaven on the Moon. Experts around the world are being consulted to create an action plan that will culminate with the building of Moon-base prototypes on Earth, followed by a building an actual sustainable settlement on the Moon in the next decade. The action plan is being built on discussions and recommendations from the Lunar Exploration and Analysis Group (LEAG), the European Lunar Symposium, the International Space Development Conference, the NewSpace Symposium, the International Astronautical Congress (IAC), and many other worldwide space forums.

Part of IMA's long-term strategy is a creation of a prototype Moon-base in Hawai'i to test all of the equipment and scientific research needed to build Mahina Lani. The first steps have been taken to try to acquire land on the Big Island of Hawai'i, as well as finances, partners and other critical elements to build the prototype Moonbase. Furthermore, the Hawaii - Space Exploration Analog and Simulation (HI-SEAS) research facility on the Big Island, located at 8,200 feet (2,500 meters) in elevation, is also being used for technology testing and research in preparation for the prototype Moonbase to be built. The research includes conducting simulated missions to the Moon, such the EMM IMA HI-SEAS campaign started in 2019.



Figure 1: Artistic rendition of a version of Mahina Lani on the Moon.