

20th IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM (A5)
Interactive Presentations (IP)

Author: Mr. Hamed Gamal
Space Generation Advisory Council (SGAC), Poland

HUMAN EXPLORATION OF VENUS: A FEASIBILITY STUDY FOR A HUMAN COLONIZATION
ON VENUS

Abstract

this paper targets displaying the possibilities of having human settlements on Venus. Providing a detailed layout of the previous efforts done by various space agencies and institutes to reach the planet's surface. Studying the planet's characteristics and structure from a perspective of long duration science missions. Alongside discussing critical technical segments of having a human landing on Venus with an analysis of the reasons of previous landing failures besides the settlements main technical characteristics. The study also discusses the scientific tasks the crew shall focus on from and their safety point of view. This paper is meant to encourage the space oriented research groups to reconsider colonising Venus as a possibility for the human future. Offering a survey about the feasibility of having an active human settlement on Venus. Also it will discuss the benefits of such an act with a comparison with other planetary settlement plans from the point of view of its safety and feasibility.