## 19TH IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM (A5) Interactive Presentations (IP)

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## NEW PROJECT OF PRIVATE SCIENTIFIC AND COMMERCIAL PILOTED EXPEDITION TO MARS AND PHOBOS.

## Abstract

Abstract In the report the specific project and terms of realization of private scientific and commercial expedition to Mars and its satellite Phobos will be declared, and also the subject of possible cheap options of expeditions to Mars will be continued: 1. Extremal expedition Earth-Mars in 69,7 days with stay on a Fobos Deimos and Mars within several months. The project distinguishes extremal braking in the atmosphere of Mars. For return to the earth it is planned to use sensational fuel........ normal soil of a Fobos or Deimos! 2. Project expedition Earth-Mars of 110 days and 144 days. in the project the newest and reliable system of landing to Mars will be used. For relocation on a planet it is planned to use a piloted rover and some variant of aircrafts and even helicopters. 3. The project of piloted expedition to Mars in which is planned to use original devices for fuel production on Mars a Fobos or Demos. 4. The expedition project to Mars with use of a solar sail. 5. The expedition project to Mars in which is planned to use International Space Station modules! 6. The project of expedition of International Space Station to Mars with its landing on the Fobos or Demos. 7. Different options of protection against radiation of members of Martian expeditions will be provided