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IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Calling Planet Earth - Space Outreach to the General Public (6)

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WHY THE CIVILIAN SPACE DEVELOPMENT SHALL KICK-OFF NOW

Abstract

The current extremely critical situation sees several concurrent crises threatening civilizational survival itself. The global risk is very high, and would require very much more attention and dedicated resources by the decision makers, and not only in the domain of space policy. This paper analyzes the current historical conjunction by different points of view – social, economical, environmental, anthropological – with particular attention to the possibility that the worsening of the global multiple crises could invalidate the efforts to open the space frontiers. Understanding the immanent global civilization risks and the related mitigation strategy, an active strategy, to go over the passive approach so far adopted by the leaders of Planet Earth. The status of the expansion into outer space as a cohesive social process is analyzed as well, in assessing the probabilities of success, taking into consideration the social, economical and political climates and the minimal conditions essential to success, i.e. what should change to make this possible. The futurist narrative of anticipation was promising the future in space since a couple of centuries so far. The time to realize that future is NOW, or we could miss the favorable historical window. A comprehensive SWAT analysis – risks vs. opportunities – shows that initial meaningful steps of civilian space development shall take place within 2030, or the "launch window" could be missed forever. The aim of this paper is to draft the key arguments for large public outreach, aimed to gain public consensus and support to a coherent plan, giving priority to the following goals (excerpt from the 3rd Space Renaissance World Congress Final Resolution): 1. Not going back, but going forward to the Moon: to produce fuel in space, from lunar and asteroidal materials. 2. Space debris recovery and reuse. Not only an overdue cleaning action, reuse of space debris will mark the transition towards the first orbital industrial business. 3. Enhance life protection in space, from hard radiations. 4. Start experimenting with simulated gravity, to protect human health from damages to perception, psychology and physical conditions. 5. Target younger generations to empower their growth and inspire them on their path to space. 6. Supporting 1007. Produce food in space. 8. Space Safety. Protection from asteroids impacts and strong solar storms. 9. Support space tourism industries effort to develop civilian space travel and accommodations (hotels). 10. Space Based Solar Power, to feed the space industrial infrastructures. 11. Support space related art and bring art into space. 12. To add an 18th SDG, bootstrap the civilian space development, to UN 17 SDGs.