## 32nd IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Space Assets and Disaster Management (4)

Author: Mr. Guadalupe Espinoza Gastelum Space Generation Advisory Council (SGAC), United States

> Ms. Dulce Janet Chiquito López United States

## IMPLEMENTING ASTRONAUT MITIGATION STRATEGIES TO OVERCOME ISOLATION DURING A QUARANTINE

## Abstract

The effect the COVID-19 pandemic has had in every individual around the world shows the impact of the emotional and mental state that a human must go through to comply with strict quarantine routines that have lasted for weeks. This paper focuses on the idea that astronauts have gone through similar types of isolation and confinement that have significantly altered the human psychology and physiology. Astronauts' test strategies have helped to develop a plan to mitigate the negative impacts of isolation which can be applied to every single person on earth, especially through events like the current pandemic. There is a consensus that the pandemic is not an isolated event but a cautionary tale of things to come in a world that is beginning to grapple with the impact of climate change. The future studies of the pandemic must be seen not as an autopsy of what happened but as a chance to prepare and implement safety mitigation plans that can help the world cope and confront any future outbreaks. For communities to function, they need to ensure a basic state of stable mental and emotional wellbeing. In light of space exploration for long missions within complex environments such as the International Space Station, the adverse effects on the human body have already been explored and mitigated, which can be applied to a society desperately looking for the key strategy to increase a healthier endurance in the middle of a quarantine. By studying the coping mechanisms, routines, and activities employed by astronauts that have spent months in space, a guide can be developed to help the common citizen mentally survive a time of social isolation while their subconscious deals with the knowledge that there is always a potential for danger.