

IAF SPACE SYSTEMS SYMPOSIUM (D1)
Innovative and Visionary Space Systems (1)Author: Ms. Magdalena Filcek
PolandCUTTING EDGE SOLUTION FOR EFFECTIVE AND SAFE MISSIONS-NEUROARCHITECTURE
SYSTEM OF VINCI POWER NAP® -REVOLUTION IN FAST STRESS REDUCTION,
REGENERATING BODY & MIND WHICH CAN HELP YOU, PILOTS,
ASTRONAUTS:BEFORE,DURING AND AFTER SPACE TRAVELS**Abstract**

In the isolation and intensive work conditions of a spacecraft - coping with stress will be crucial during long-term space missions to Mars to preserve the physiological, mental and emotional stability of individual crew members. Innovative VINCI POWER NAP® patented science technology as a novel concept of space system can help: people on Earth, pilots and astronauts in spacecrafts to perform at peak of productivity, by increasing: well-being, efficiency, reaction time, motor behavior, so needed to avoid performance errors due to sleep loss, circadian desynchronization, fatigue and work overload. It is a revolution tool of stress management: for crew training by getting them used to the zero gravity position and teaching the body and mind the best state of relax before space missions; to treating anxiety, giving fast stress reduction, blissness, emotional safe - during it; and healing trauma, depression and PTSD after by creating special neuroarchitecture environment for power naps. Microgravity seems to neutralize the majority of cancer cells, helps with lymphatics system and also lets the crew to experience the bright side of "weight of weightlessness". The idea has come from merging inspiration of: microgravity from space with gravity and relaxing environments from Earth; together with the impact of interior architecture on heredity of our neurophysiology. This combination of art and science is creating the best benefit for humankind, as psychological wellbeing and happiness are important for most people. There are physical, psychological, neurological, sociological, emotional consequences of exposure to noise, vibration and being confined to a metal cell. They are increasing even more without possibility to see the Mother Earth, creates feeling of separation as the Overview Effect fades away on longer distance trips.

Astronauts are superheroes but they are not immune to the everyday emotional distress, irritability from feeling both crowded and lonely at the same time, having: troubles with sleeping, insomnia, depression, huge stress, trauma, anxiety and fear; as we know its from science's researches and personal evidences of astronauts' experiences.

VINCI POWER NAP® visionary system can help in many facets for space travelers, such as: Environmental Factors, Habitability, Human Factors, Medical Capabilities, Physiology, Psychosocial and Behavioral Health, Human Response to Spaceflight, Performance, Physiological Health, Sleep in Spaceflight Analogs, Countermeasures, Human Research Program, Stress Management and Resilience Training for Optimal Performance, Life Support, Medical Care, Crew Training.

In this perspective literally "dreams" of yesterday are the hope of today and discovering the reality of tomorrow.