

## **Peak Experience: Optimizing the Conditions of Inner Space for Outer Space**

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### **Summary**

In order for suborbital scientists and space tourists to achieve a peak experience, training in the area of psychological acclimation combined with continuous practice is needed before the mission. We propose that training must address the psychological problems that may be experienced during flight to alleviate them, coupled with situational awareness along the flight profile to ensure a peak experience.

### **Introduction**

Until now, training for commercial astronauts has primarily focused on preparing one's body for the changes in G forces, and understanding the potential effects on the body during the different flight phases. Most commercial astronauts, looking for more than just a joy ride in space seek a "peak experience" to coincide with their personal mission. This is the case for both suborbital scientists as well as space tourists. In order to achieve a peak experience, training in the area of psychological acclimation combined with continuous practice is needed before the mission to ensure success. In order for the training to be effective, it must take into account the psychological problems which astronauts may experience during flight (stress, anxiety, distraction, and a lack of focus) and help in alleviating them.

### **Peak Experience- what is it and how to optimize the conditions**

- Peak experiences are transient moments of self-actualization.
- A peak experience is one that takes you out of yourself that makes you feel very tiny, or very large, to some extent one with life or nature. It gives you a feeling of being a part of the infinite and the eternal.
- Most people report that it has only happened to them a few times in their life.

Certain factors can aid in the creation of the experience such as good health, spiritual intent, proper breathing, appropriate vehicle (meditation, technique, or technology), sensory resonance, and a trained facilitator to assist one through the process. Ample research suggests that increasing Alpha brainwaves (at 10 Hz) is essential for entering "the zone" of peak

performance. Both space tourists and suborbital scientists can benefit from stimulating their brain's production of Alpha waves for optimizing the conditions for a peak experience.

### **Situational Awareness Flow Protocol during each flight phase**

Each flight profile can be divided into several phases with its accompanying challenges. It is important for the commercial astronaut to not only understand the appropriate physical response to maintain consciousness but also the psychological response to stay in a fully focused state. A "situation awareness flow protocol" is a helpful tool to center the focus of the individual during the challenges of each phase.

### **Advice for commercial astronauts**

Most commercial astronauts, have only one chance to get it right and achieve that "once in a lifetime experience". Therefore it is prudent to train not only the body but also the mind. Both space scientists and space tourists can benefit from:

- Taking training that simulates their particular spacecraft's G -forces as well as giving an opportunity to become fully aware of the psychological stresses during these flight phases.
- Creating strategies to deal with relationships with other passengers and how to resolve potential conflicts.

### **Recommendations for Space Operators and Space Training Organizations**

Since space operators and training organizations are in the business of fulfilling customer expectations, it makes sense for them to do what they can to help customers accomplish their mission in space and recommend to their customers that they prepare themselves psychologically before, during and after their mission.

### **References**

1. "A comprehensive review of the psychological effects of brainwave entrainment" (2008). *Alternative Therapies*. Sept/Oct/ vol. 14. No.5.
2. Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.