

21st SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5)
Space Architecture: Exploration and Tourism (3)

Author: Mr. Taseer Ahmad
University of Kent at Canterbury, United Kingdom, t.ahmad@kent.ac.uk

INNOVATIVE DESIGN INTERIORS FOR SPACE TOURISM: GALLEY AND HYGIENE FACILITIES

Abstract

Location: Low Earth Orbit. Site: Space Habitation Module(s) docked to a Space Hotel Station. Users: Space tourists.

The design task was to provide a habitable interior for an orbiting, zero-gravity space hotel module(s). The Client, a hotelier, required that the facility provide an ambience for the perfect vacation getaway. The designers have undertaken a reappraisal of all habitation facilities provided for the space tourists. All aspects of habitation are designed for, with detail designs for Galley and Hygiene facilities.

- SLEEPING - Deployable Bed - Audio/visual Equipment - Personal Computer - Personal Stowage

- GALLEY - Dining Area - Plant Growth Area - Food Preparation - Cold/hot Stowage - Wet/Dry

Areas

- HYGIENE - Toilets - Shower - Washing/grooming

- RECREATION AREA - Library - Audio/visual Equipment - Desk Space - Personal Stations

- EXERCISE AREA - Interactive Video Screen - Bike Ergonometers - Treadmill - Weight-training -

Lower Body Negative Pressure Suit - Electronic Muscle Simulation Device

The design interiors proposed are a radical re-think of the previously pragmatics and engineering-driven space habitats and transit vehicle interiors. They put human-factors, comfort and well-being at the centre of the design criteria. The interiors utilise interactivity, responsivity and intelligent clothing systems to create a fundamentally environmental design. The resultant habitat may be described as a micro-ecosystem or micro-climate that is tuned to the physiology of the tourist-user.