

Fall Semester 2004

Part 10

No. 1



S·P·A·C·E TOURISM II™

Lecture Series given by Dr.-Ing. Robert Alexander Goehlich

© 2003 by Robert A. Goehlich



Content

No. 2



- **General**
- **Space Adventures**
- **Project STMS II**
- **Requests from Audience for Lectures**

General Contact

No. 3



Dr.-Ing. Robert Alexander GOEHLICH
Mobile: +81-(0)90 1767 1667
Fax: +81-(0)45-566-1778
Email: mail@robert-goehlich.de
Internet: www.robert-goehlich.de



Ms. Akiko FUJIMOTO (Teaching Assistant)
Mobile: +81-(0)80-5039-6222
Email: af07302002@yahoo.co.jp



Mr. Kenji HASEGAWA (Webmaster)
Mobile: n.a.
Email: malayzaru@hotmail.com



Keio University
Department of System Design
Engineering
Ohkami Laboratory
(Space System Engineering)
Office 14-609/14-620
3-14-1 Hiyoshi
Kohoku-ku
Yokohama 223-8522
JAPAN

Introduction

Goal Definition of this Lecture

No. 4



The goal of this lecture is to learn more about the programs offered by Space Adventures – the biggest space tourism travel agency.

Space Adventures Homepage

No. 5



Space Adventures Company Overview

No. 6



President/CEO:	Eric Anderson
Headquarter:	Arlington, USA plus 50 agents worldwide
Foundation:	1998
Goal:	Open the space frontier to everyone and promote private space exploration by building a series of successful, privately funded spaceflight missions.
Service/Product:	A variety of space training adventures such as zero gravity and supersonic jet flights, cosmonaut training and actual flights into space.
Major Success:	Pioneered space tourism by assisting the world's first two space tourists, Dennis Tito and Mark Shuttleworth.

Space Adventures

Overview of Programs (1/2)

No. 7



Orbital Space Flight - \$20 Million

Includes 1 week at International Space Station, roundtrip transportation, 6 months of training.



Orbital Prequalification Program - \$200 000

Includes 2 weeks at Star City, centrifuge, zero-gravity flight, MiG-25 flight, MiG-29 Flight, neutral buoyancy training, Soyuz simulator.



Suborbital Spaceflight Program - \$102 000

Includes 1 flight above 100 km, 4 days accommodation at spaceport, centrifuge, RLV simulator, lectures.



MiG-25 Edge of Space Jet Program - \$19 000

Includes 1 flight above 27 km with Mach 2,5, centrifuge, 5 days accommodation.

Space Adventures

Overview of Programs (2/2)

No. 8



Neutral Buoyancy Training – \$15 000

Includes simulated space-walk training, 3 days accommodation.



Soyuz Simulation – \$13 000

Includes docking simulations to ISS, 3 days accommodation.



Zero-Gravity Flight Program - \$7000

Includes 1 Ilyushin flight (8-12 parabolas with 20 s zero-gravity each), 3 days accommodation.



Centrifuge - \$4500

Includes 1 simulated Soyuz launch/landing g-profile to ISS, 1 day accommodation.

Space Adventures

Details of MiG-25 Program



No. 9



(movie)

Space Adventures

Details of Centrifuge



No. 10



Typical short-term simulation:

- Soyuz launch through insertion into orbit (9 minutes, 4 g peak)
- Orbital flight (1 hour, mimic of weightlessness)
- Soyuz de-orbiting and reentry from orbit (7 minutes, 6,5 g peak)

Example:
Soyuz launch (Space
Adventures)



Space Adventures

Details of Services

No. 11



(movie)

