

Space Tourism: Having Fun at Your Own Risk

Rachel A. Yates, Esq.

Holland & Hart LLP

July 23, 2008



No Beverages Will Be Served on this Flight

Journey to Space	Provider	Cost *
Lunar flyby or personal mission	Space Adventures w/ Russia	\$100,000,000
Flights to the International Space Station (ISS)	Space Adventures w/Russia	\$35,000,000- \$45,000,000
90-min spacewalk from ISS	Space Adventures w/Russia	\$45,000,000- \$55,000,000
4-week stay at fully-habitable module on orbit	Bigelow Aerospace	\$14,900,000
Suborbital flight	The Spaceship Co.	\$200,000
90-minute parabolic flight	Zero Gravity Corp.	\$3950

Having Fun...Until Something Goes Wrong

The Players

Ocean Originating Platform Sys. Co. (OOPS)
(US, Britain, Australia)

Downlink and Reconnaissance Network (DARN)
(Spain)

Gizmo Group
(India)

Global Space Station
(Japan, Russia, Canada)



Liability Convention (1972)

Definitions:

- Launching state is one that launches, procures launch, or state from where launched
- Damage is loss of life, personal injury, impairment of health, and loss or damage to property



Liability Convention (1972)

- Absolute liability for damage caused by space object on Earth or in airspace
- If damage occurs elsewhere, then fault-based liability
- Joint & several liability, but can contract for indemnity
- Claims process for resolution



Regulation of Space Tourism

- Commercial Space Launch Activities Act, 49 USC 70101 (1994)
 - launch & reentry activities thru FAA
- FAA regulation, 14 CFR pt 460
 - only expendable launch vehicles until 2004
 - Statutory amendments in 12/04 prompted NPRM for human spaceflight; final in 12/06
 - Experimental permits for reusable suborbital launch vehicles (2007)



FAA Regulation of Human Spaceflight for Suborbital Trips

- Design & Operational Requirements
 - off limits until 2012
- Crew Safety/Training
 - Pilot certificate w/instrument rating
 - Aeronautical exp. to pilot in NAS
 - Mission specific training
 - If safety-critical role, FAA 2nd class airman med. cf



FAA Regulation of Human Spaceflight for Suborbital Trips

- Participant Safety
 - Minimal flight training for emergencies
 - No medical
 - Leave your weapons at home
 - Risk warnings
- Consent and Waiver



Legal Gaps Filled Informally by Outside Pressure

- Insurance: high premiums until operators establish track record
- Disclosures: safety record & hazards
- Industry associations



Industry Response

- Company requirements: medical certification, safety training
- Waivers: protect company; choice of law



Space Tourism: Having Fun at Your Own Risk

Rachel A. Yates, Esq.

Holland & Hart LLP

July 23, 2008

