

**Fall Semester 2004**

**Part 13**

No. 1



# S·P·A·C·E TOURISM II™

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

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## **Content**

No. 2



- **General**
- **Conclusion**
- **Project STMS II**
- **Requests from Audience for Lectures**

## General Contact

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## Development of Space Tourism Selected Privately-Financed Events

No. 4



Shuttleworth ISS Flight  
(April, 2002)



SpaceShipOne X Prize Flight  
(September 29, 2004)



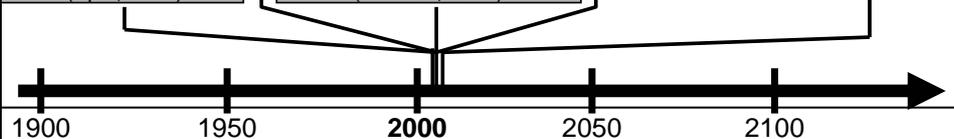
SpaceShipOne X Prize Flight  
(October 4, 2004)



Tito ISS Flight  
(April, 2001)



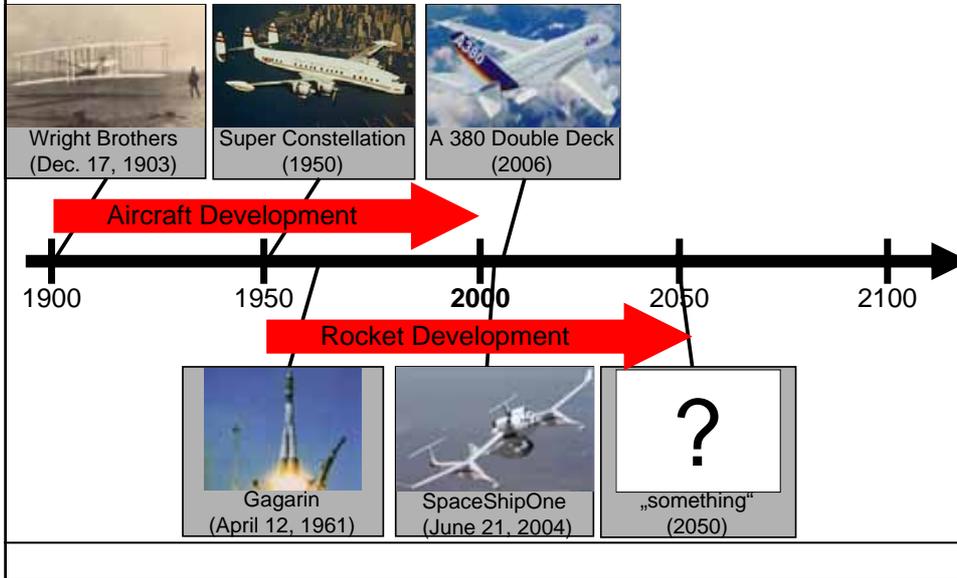
SpaceShipOne 100 km Flight  
(June 21, 2004)



# Space Transportation System

The meaning of 100 years...

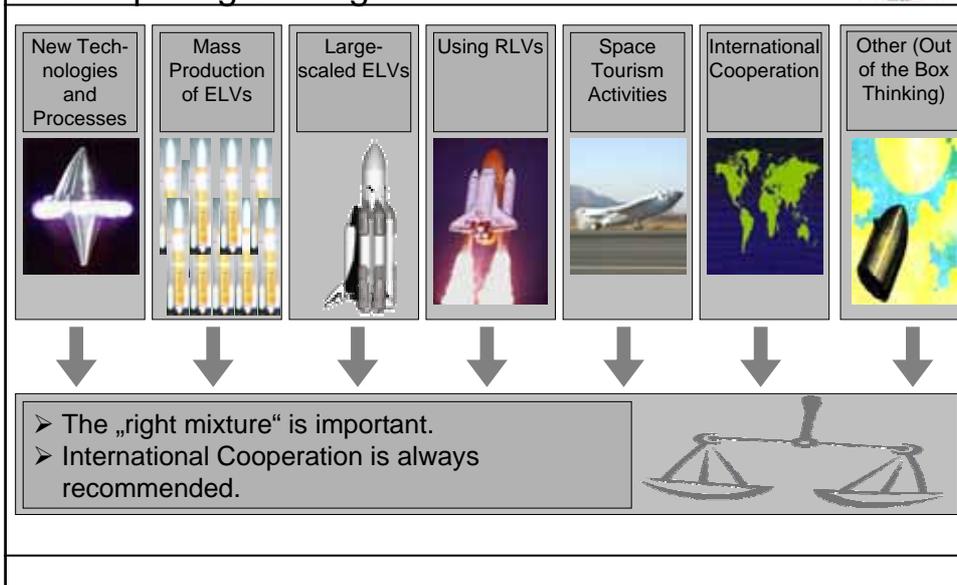
No. 5



# Space Transportation System

Comparing Strategies

No. 6

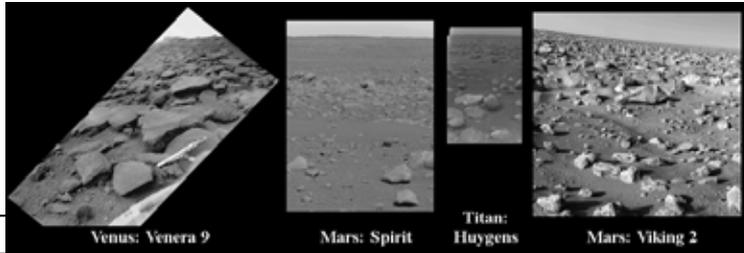




## Open Questions

To challenging, to slow or no benefit? (1/2) No. 7

- **Moon** has been the most visited, with robotic landers from the former Soviet Union and from NASA, as well as six successful landings with astronauts in the late 1960's and 1970's.
- Planet **Venus** was visited by four successful unmanned landers from the former Soviet Union in the 1970's.
- Planet **Mars** has been visited by a variety of NASA robotic landers starting in the 1970's with the two Viking landers, 1997's Mars Pathfinder, and 2004's Spirit and Opportunity rovers.
- Soft-crash-landing of the NEAR spacecraft on the asteroid **Eros** in 2001.
- ESA's Huygens probe on Saturn's moon **Titan** in 2005.



(NSSDC, Planetary Photojournal, ESA, NASA, University of Arizona)



## Open Questions

To challenging, to slow or no benefit? (2/2) No. 8

Size of the universe:

about 10,000,000,000,000,000,000 stars

Landed on by a spacecraft:

5 bodies



(Malin/AAO)



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