

# Towards blast-off: Space tourism in the Karoo?

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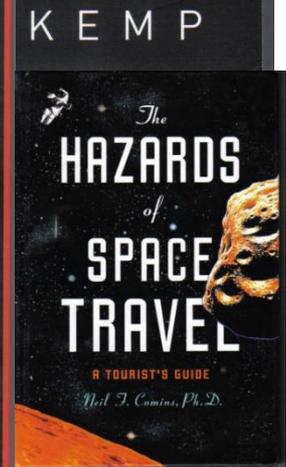
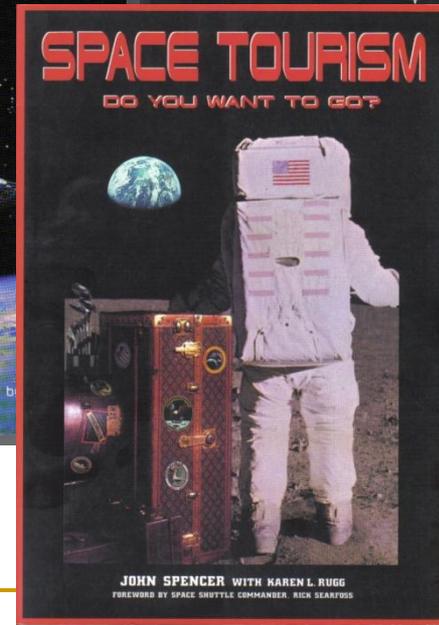
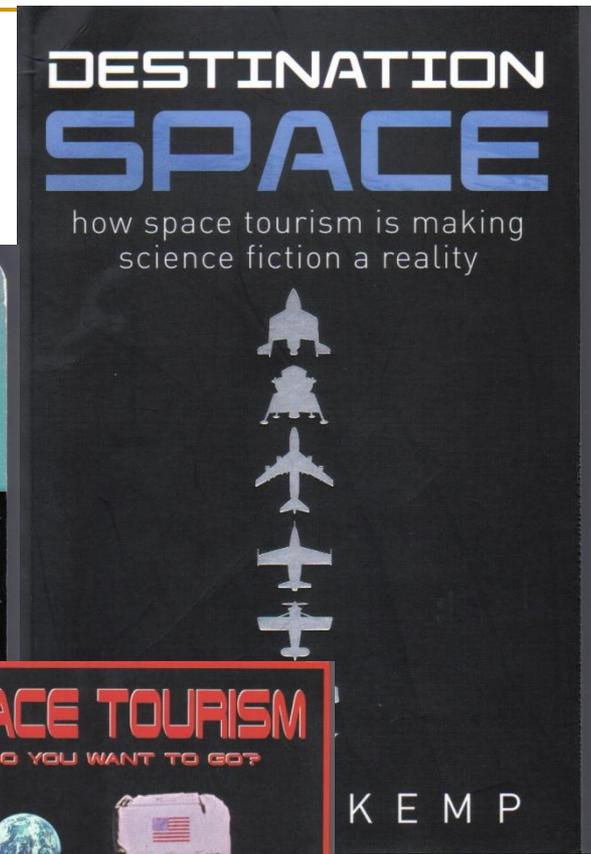
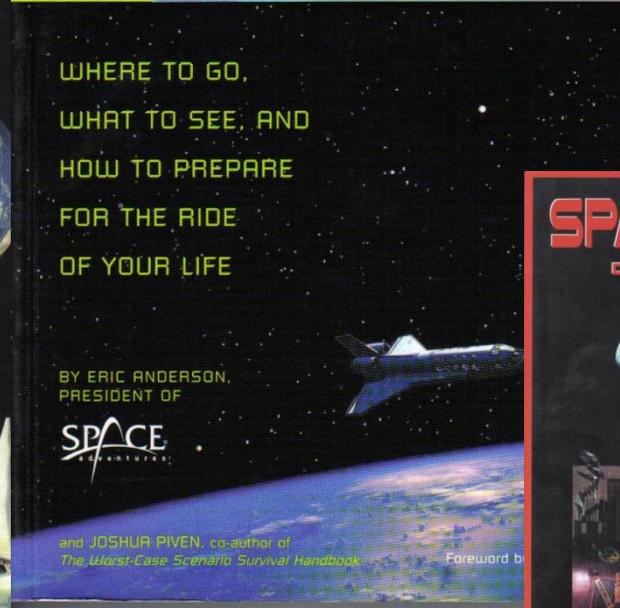
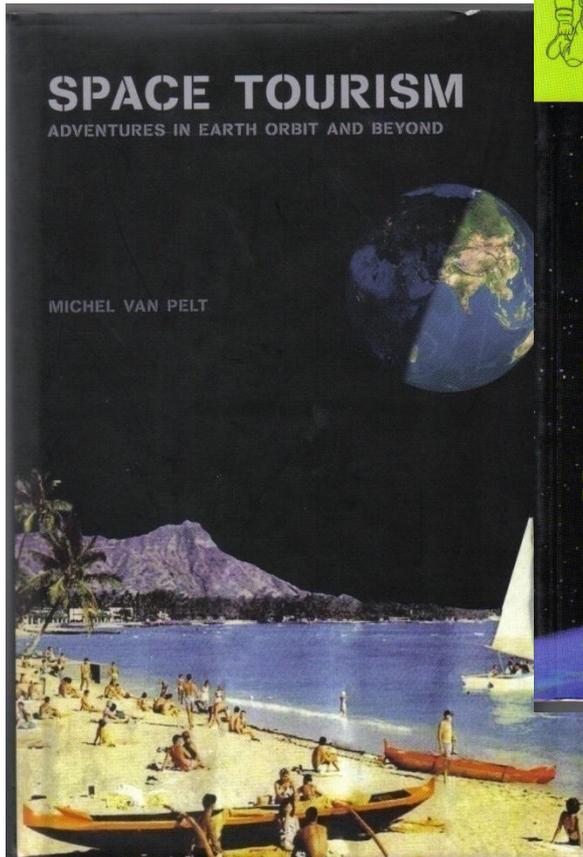
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Gariepdam **Guy Fawkes Day 2009**

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# Some Space Tourism Publications



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# **SUB-ORBITAL SPACE TOURISM**

- Mothership carries SpaceShipTwo (SS2) up to 25km
  - SS2 disengages – fires rocket engines – at 100km+ “the motor shuts down and the spaceship coasts into space for a few minutes” describing a parabola in an ethereal whisper-quiet realm (Kemp, 2007)
  - 4-5 minutes weightlessness – great view
  - Pilots then activate SS2’s “angel wings”, where “the ship splits itself in half” to facilitate the critical re-entry phase (Belfiore, 2007).
  - SS2 descends from its apogee and re-enters the Earth’s atmosphere.
  - SS2 falls like a giant shuttlecock until pilots glide it into base
  - Whole package – 4 days – 3 days training – simulations – jet flights – flight in mothership – celebratory party afterwards – luxury accomm – US\$200 000pp.
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## OUR MISSION

The aim of Spaceport Sweden is to become Europe's first and most obvious place for personal suborbital spaceflights. **We are open for all operators!**

Spaceport Sweden is based in

## NEWS

6/20/2008

**Spaceport Sweden at the Symposium for Private Human Access to Space in Arcachon 2008**

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## FIRST FLIGHT

2012 we will give ordinary people the opportunity to become non-professional astronauts by taking off from Spaceport Sweden. We will do this together with Virgin Galactic, the world's first commercial space line. as they have

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# SPACEPORT REQUIREMENTS

- **Restricted airspace from the ground to infinity in order to secure an unobstructed pathway into orbit**
  - **High elevation (Virgin Galactic's spaceport in New Mexico is at an elevation of about 1600 metres).**
  - **Sparsely populated surrounds to minimize insurance and risks. The surrounds should also be considered ineligible for appreciable development in the future.**
  - **A high predominance of clear bright days in order to ensure reliability of launch schedules.**
  - **Dry air to minimise corrosion**
  - **Hosted by a stable country with “rational and enabling laws”**
  - **Secure an anchor tenant in the interests of commercial sustainability.**
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# SPACEPORTS INTERNATIONALLY

- “Localities... around the world are doing their best to attract the emerging commercial spaceflight business. **To some places with plenty of open space – in the middle of nowhere, in other words, and typically left behind by traditional businesses – spaceports look like economic salvation.** Locales in Singapore, the United Arab Emirates, Sweden, and Scotland all hope to host spaceports in the near future [while] in the United States, New Mexico, Wisconsin, Florida, California, Virginia and Texas all play host to embryonic commercial spaceports” – Belfiore (2007)
  - There are already functioning spaceports in Alaska, Australia and Kazakhstan (Anderson, 2004) and Israel, Brazil, China, Russia, India, Japan and the Ukraine also have embryonic spaceport capabilities (Kemp, 2007)
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# SPACEPORT KAROO?

- **WHY NOT A SPACEPORT IN THE KAROO? – can southern Africa afford *not* to have a spaceport?**

