



Elevator Up, Please!

David Keener

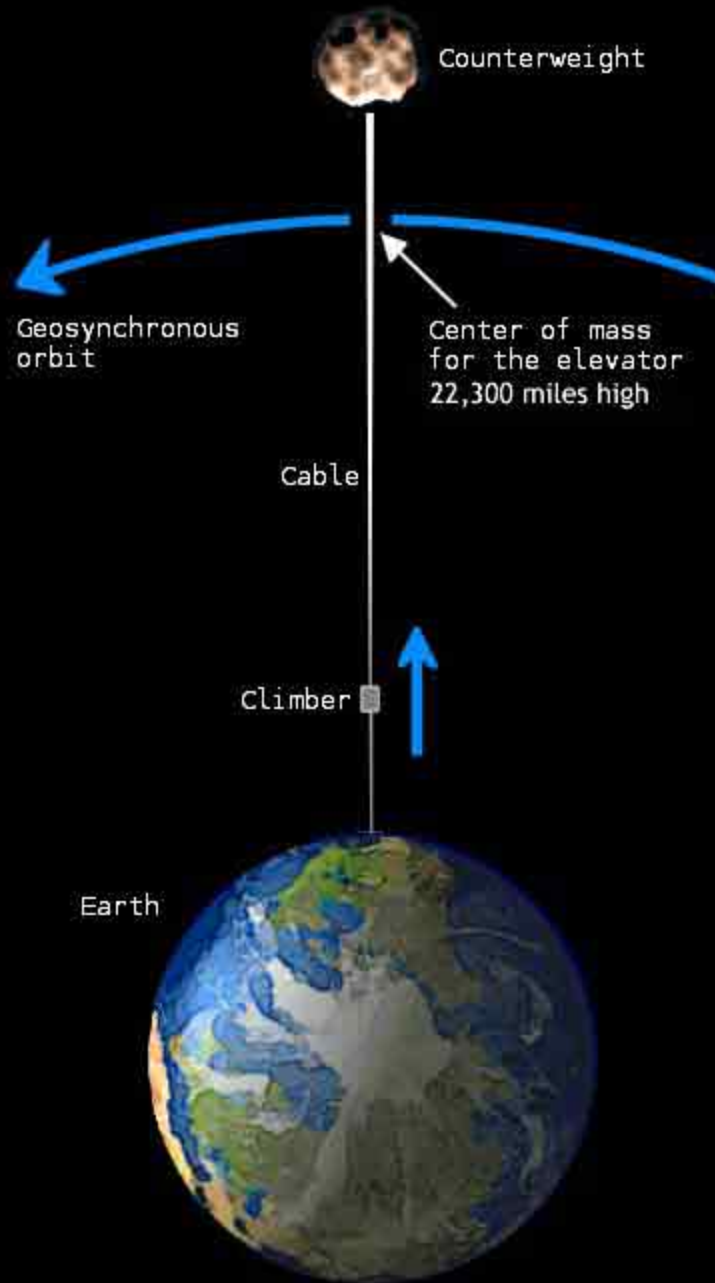
<http://www.davidkeener.org>

Space Travel Needs to...

- ...be safe
- ...be cheap
- ...be easily repeatable

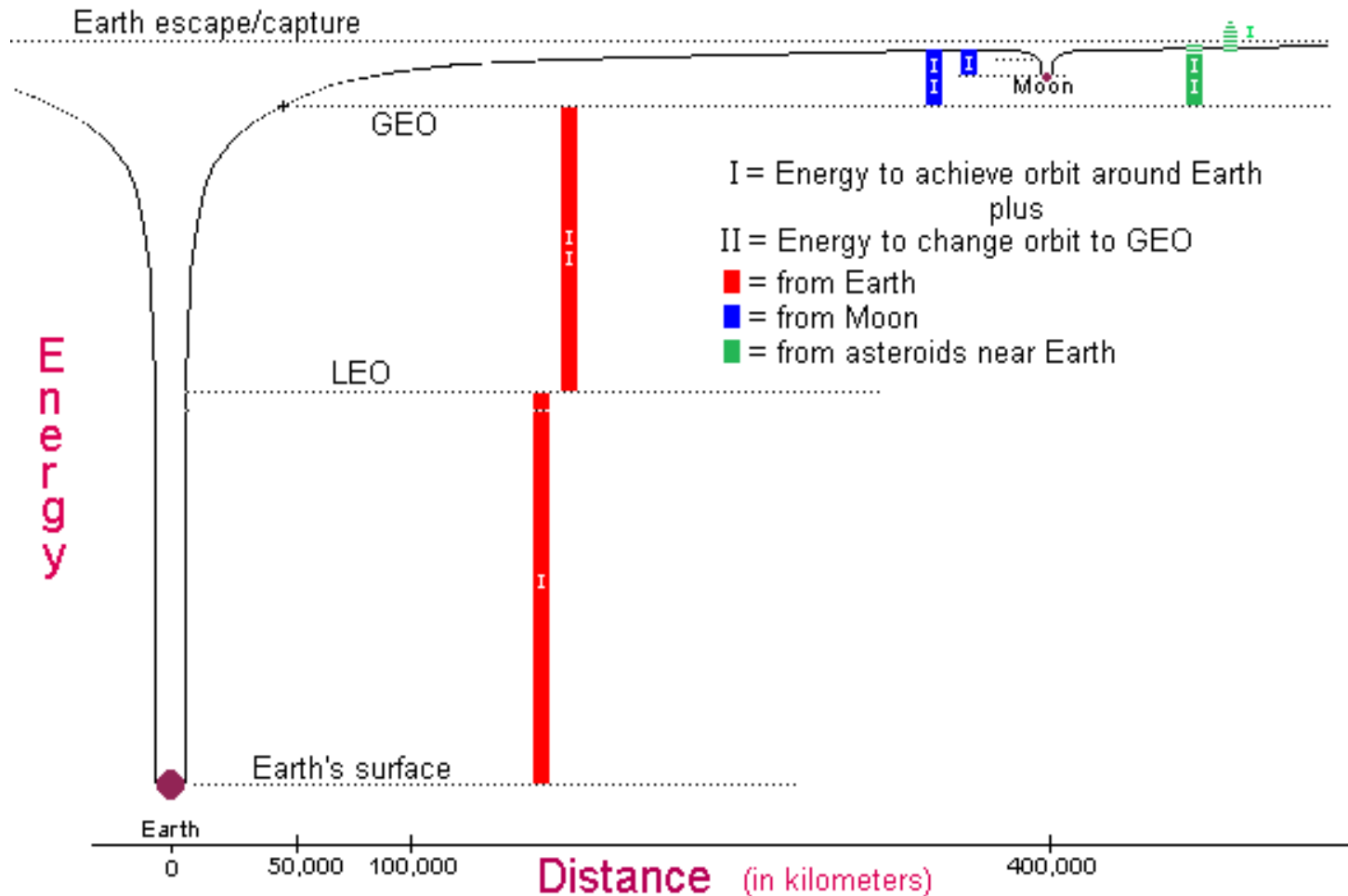






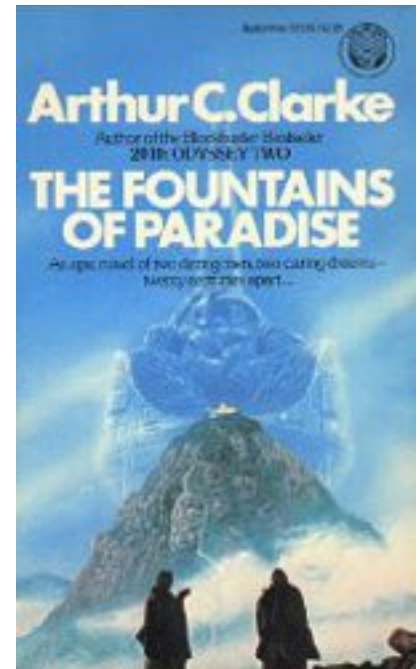
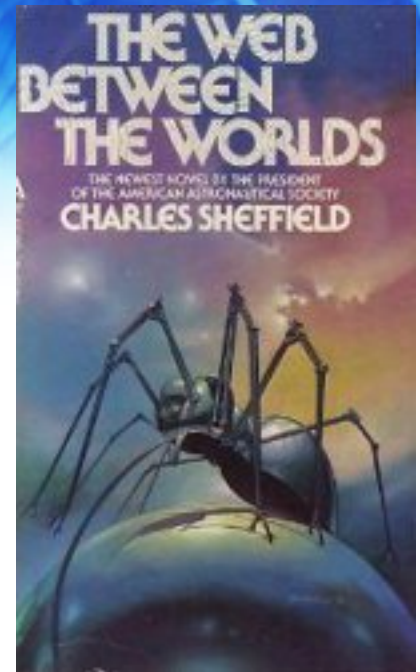
Space Elevator

Escaping the Gravity Well



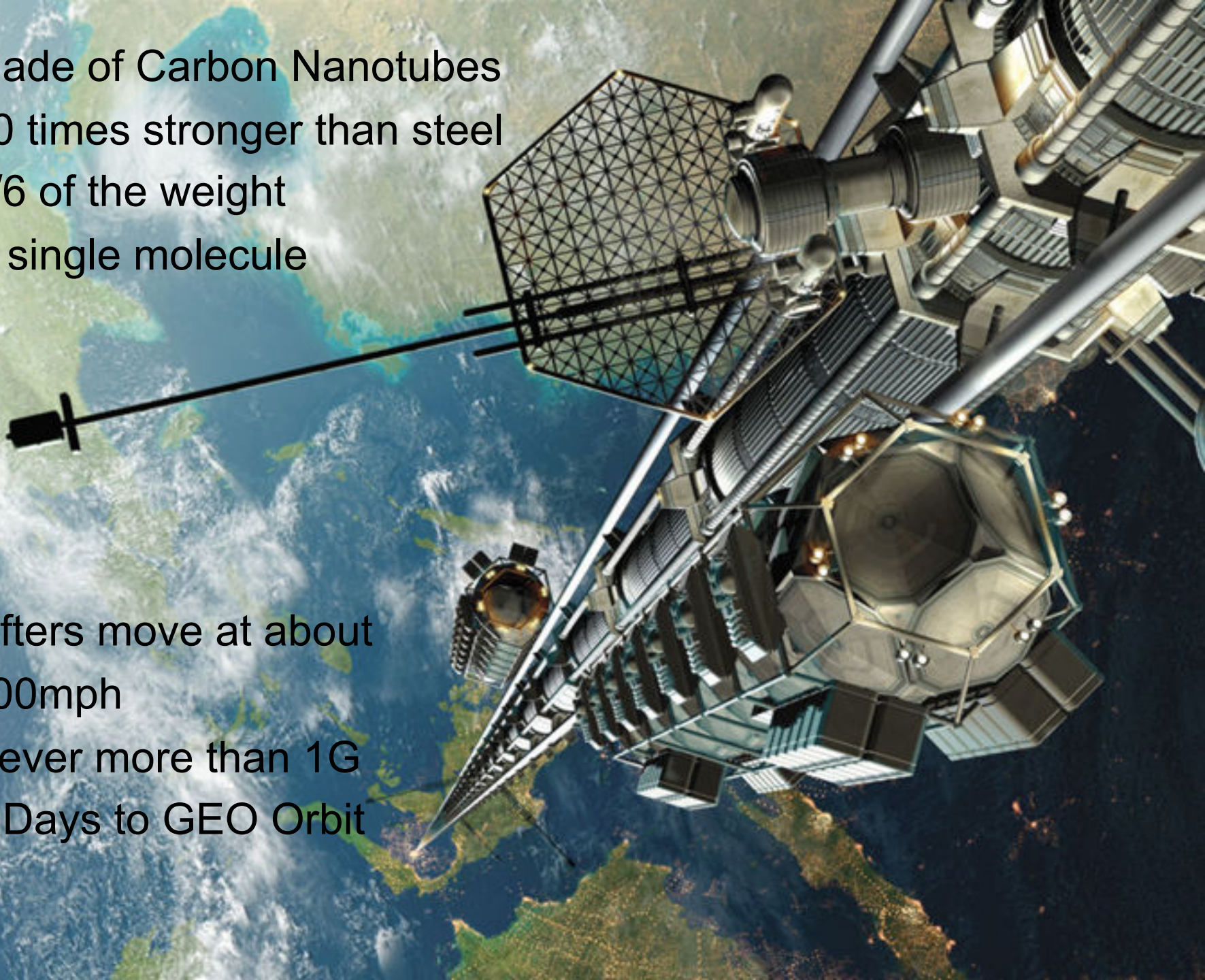
Some Background

- First concept by Konstantin Tsiolkovsky in 1895
- In science journals for years
- More serious work from about 1966 onwards
- Popularized for a mainstream audience in 1979



- Made of Carbon Nanotubes
- 50 times stronger than steel
- 1/6 of the weight
- A single molecule

- Lifters move at about 200mph
- Never more than 1G
- 8 Days to GEO Orbit



More Details...

- Near the equator to avoid coriolis forces
- Can get counter-weight from near-Earth asteroids
- Cheap, repeatable space travel





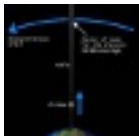
Credits



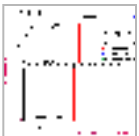
NASA shuttle launch photo



ET promotional photo



<http://infinitybound.com/index.php/2009/09/08/space-elevator-materials-are-the-key>



<http://www.permanent.com/t-theory.htm> (Mark Prado)



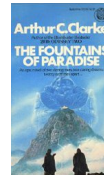
<http://io9.com/5757489/how-to-build-a-space-elevator-and-become-an-interplanetary-civilization>



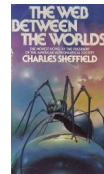
http://spaceelevatorwiki.com/wiki/index.php/Main_Page



<http://www.eocommunity.com/showthread.php?tid=23798>



The Fountains of Paradise
By Arthur C. Clarke
Published 1979



The Web Between the Worlds
By Charles Sheffield
Published 1979