

## **Mark Hempzell – Publications (Feb 2020)**

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2. (with D.Stott) "The European Space Tug: A Reappraisal", *Journal of the British Interplanetary Society*, Vol 34, No 7, July 1981.
3. (with R.C.Parkinson) "The Potential Market for a Low Cost Launch Vehicle", *Journal of the British Interplanetary Society* Vol 37 No 2 Feb 1984 (also in "*Space: A Developing Role for Europe*" Vol 56 of Science and Technology series ASS publication).
4. (with R.C.Parkinson) "Space Station Architecture - A European Viewpoint", presented at *BIS Symposium on Space Transportation*, London, April 1984.
5. (with R.C.Parkinson) "Future Launch Systems", *Aerospace* Vol 12 No 4, April 1985.
6. "Orbital Replacement Units", *Journal of the British Interplanetary Society*, Vol 39, No 2, February 1986.
7. "Standardisation of Interfaces Within the Space Infrastructure", *Journal of the British Interplanetary Society*, Vol 39, No 2, February 1986.
8. "Multi-Role Capsule - An Introduction", *Journal of the British Interplanetary Society*, Vol 42, No 2, February 1989.
9. "Rationale and Requirements for the Multi-Role Capsule", *Journal of the British Interplanetary Society*, Vol 42 No 2, February 1989.
10. (with R.J.Hannigan), "Multi-Role Capsule System Description", *Journal of the British Interplanetary Society*, Vol 42 No 2, February 1989.
11. (with I.Waters) "The Re-entry Environment of the Multi-Role Capsule", *Journal of the British Interplanetary Society* Vol 42 No 2, February 1989.
12. (with R.C.Parkinson) "Multi-Role Capsule: Programme and Costs", *Journal of the British Interplanetary Society* Vol 42 No 2, February 1989.
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14. "An Expanded Space Infrastructure", *Journal of the British Interplanetary Society* Vol 43 No 10, November 1989.
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16. "European Manned In-orbit Infrastructure - An Alternative Viewpoint", *Journal of the British Interplanetary Society*, Vol 43 No 10, October 1990
17. (with R.C.Parkinson) "Cost Impacts of Supporting a Future European Space Station", presented at 41st International Astronautical Federation Congress, Dresden Oct 1990, Paper No. IAF-90-602. Later published in *Space Technology* Vol 12 No 4.
18. (with R.C.Parkinson and P.J.Conchie) "Potential Evolution of an International Moon Base Programme", presented at 41st International Astronautical Federation Congress, Dresden Oct 1990, Paper No. IAF-90-602

19. "The Cost Impact of Space Station Architectural Approaches", *The Journal of Practical Applications in Space* , Vol 3 No 3, Spring 1992.
20. (with R.C.Parkinson) "Cost Impacts of Supporting A Future European Space Station", *Space Technology*, Vol 12, No 4.,1992
21. "An Overview of the Bus Alpha Satellite Programme", presented at the World Space Congress, Washington 1992. Paper No. COSPAR Paper 1-H.04.
22. "Long Term Growth Targets for the Space Infrastructure", presented at the World Space Congress, Washington 1992. Paper No. IAA-92-0220, later published in *Journal of the British Interplanetary Society*, Vol 51 No. 7 July 1998.
23. (with R.C.Parkinson) "Space Station Interaction with Transportation System", IA, presented at the World Space Congress, Washington August 1992. Paper No. A-92-0167.
24. "British Space Industry - A Personal View", *Spaceflight* Vol 34 No 8, August 1992.
25. "The World Space Congress", *Spaceflight* Vol 34 No 11, November 1992
26. "No.1 Hit Targets the Moon", *Spaceflight* Vol 34 No 12, December 1992.
27. "A New Pattern for International Space Collaboration", *Spaceflight* Vol 35 Nos 1 & 2, January and February 1993.
28. (with R.C.Parkinson) "MAKS - Eastern Promise?", *Spaceflight* Vol 35, No 3, March 1993.
29. "HOTOL's Secret Engines Revealed", *Spaceflight* Vol 35 No 5, May 1993.
30. "STS-61 Astronauts at Bristol", *Spaceflight* Vol 35 no 6, June 1993.
31. "Polar Platform Model Unveiled", *Spaceflight* Vol 35 No 8, August 1993.
32. "Early History of the Polar Platform: 1984-87", *Spaceflight* Vol 35 No 8, August 1993.
33. "Mars Observer - Arriving For Work", *Spaceflight* Vol 35 No 9, September 1993.
34. "Extracting Power and ECLSS Consumables From Spacecraft Propulsion Systems", Presented at 44th International Astronautical Federation Congress, Graz Oct 1993, Paper No. IAF-93-S.1.460
35. "Matching Space Programme Objectives To Society's Needs", presented at 44th International Astronautical Federation Congress, Graz Oct 1993. Paper No IAA.8.1-93-765 , Later published in *Acta Astronautica* Vol 35 No 9-11 pp 733-739.
36. "Options in Phase A Objectives - What is Feasibility", presented at 44th International Astronautical Federation Congress, Graz Oct 1993 Paper No IAF-93-H.1.181
37. "Space Stations and Beyond", presented at "Space 93" conference, Hastings October 1993. Later published in *Spaceflight* Vol 36 No 1 Jan 1994.
38. "The 44th IAF Congress", *Spaceflight* Vol 36 No 1 Jan 1994.
39. "Meeting ESA Astronaut Claude Nicollier", *Spaceflight* Vol 36 No 9, Sept 1994
40. "Parametric Cost Modelling of Space Stations With Mixed Technology", presented at 45th International Astronautical Federation Congress, Jerusalem Oct 1994. Paper No IAA-94-IAA.1.1.586

41. "A Comparison of Modelling Techniques for Long Term Infrastructure Planning", , presented at 45th International Astronautical Federation Congress, Jerusalem Oct 1994. Paper No. IAA-94-IAA.8.1.705
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48. (with R.T.Moses) "A Student Satellite for Europe", presented at the 47th International Astronautical Congress. Beijing China 1996 Paper No. IAF-96-P.1.08
49. (with R.T.Moses) "Microsatellites as an Educational Tool - The Bus-Alpha Experience", presented at the BIS Symposium on Low Cost Satellites 13th September 1995 later published *Journal of the British Interplanetary Society*, Vol 49 Dec 1996.
50. "A History of Space and Limits to Growth", *Journal of the British Interplanetary Society*, Vol 51 No 9 September 1998 pp 323-336
51. "Interim Orbital Transfer Stages for Use with Reusable Launch Vehicles as an Example of "Transition Systems"", presented at the 49th International Astronautical Congress. Melbourne, Australia 1998. Paper No. IAF-98-V.2.04, later published in *Space Technology* Vol 19 No 5-6 pp227-236 1999
52. (with A Bond) "A Technical Reappraisal of Black Arrow", presented at the 49th International Astronautical Congress. Melbourne, Australia 1998 Paper No IAA-98-IAA.2.3.07
53. (with J.Murray & A Bond) "An Experimental Precooler for Air Breathing Rocket Engines", presented at the 49th International Astronautical Congress. Melbourne, Australia 1998. Paper No. IAF-98-S.5.02 Later Published in the *Journal of the British Interplanetary Society* Vol 54 No5/6 May/June 2001
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62. "The Role of Heavy Lift Vehicles in a Reusable Launch Vehicle Based Infrastructure" presented at the 52nd International Astronautical Congress Toulouse France Oct 2001 Paper No. IAF-01-V.6.06 , later published in *Journal of the British Interplanetary Society*, Vol 56, No11/12, pp369-377, Nov/Dec 2003
63. (with J. Murray, P. Hendrick, M. Claus, R. Davies) "The Role of Universities in the Early Assessment of the Technical Credibility of Advanced Space Transportation Concepts", , Presented at the 6th International Symposium on Propulsion for Space Transportation of the XXIst Century, May, 2002
64. (with N.V.Taylor) "Vacuum Thrust Optimised Expansion Deflection Nozzles" presented at the 52nd International Astronautical Congress Toulouse France Oct 2001 Paper No. IAF -02-S.2.02
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71. "Space Power as a Response to Global Catastrophes", *Acta Astronautica*, Vol 59, pp524-530, 2006
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  91. “Space Station Element Commonality Between LEO and Lunar Infrastructures”, presented at 62nd International Astronautical Congress Cape Town, South Africa, October 2011 Paper No.: IAC-11.B3.2.6 later published in the *Journal of the British Interplanetary Society* Vol 65 pp402-409, 2012
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  95. (with Roger Longstaff and Bob Parkinson) “The Potential of SKYLON to Support Space Exploration” Presented at the 65th International Astronautical Congress, Toronto October 2014, Paper No. IAC-14-A3,P.4
  96. (with multiple other authors) “A Technical Overview of a SKYLON Based European Launch Service Operator”, Presented at the 65th International Astronautical Congress, Toronto, October 2014, Paper No. IAC-14.D2.4.5. Later published in the *Journal of the British Interplanetary Society* Vol 68, pp 224-241, 2014
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## **Science Fiction**

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