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1. FULL LIST OF PUBLICATIONS

1.1 Patents

M.C. Bernasconi and K. Kotacka (1985). Reflector Antenna and Method of Fabrication. European Patent 0 201 727; U.S. Patent 4,755,819.

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1.2 Papers

1.2.1 The technology of inflatable space rigidized structures

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E Pagana & MC Bernasconi (1986). Satellite Antenna with Inflatable Reflector (in Italian). *Elettronica & Telecomunicazioni* **35**[06], 242-250.

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Marco C Bernasconi, Meindert Versteeg, & Roland Zenger (2006). Auxiliary Internal Structures (AUXIS) for an Expandable Habitat: Configuration Aspects & Hierarchical Structuring. Paper IAC-06-C2.7.03 presented at the *LVII International Astronautical Congress*, Valencia (Spain), October 2-6; *JBIS* **61**[05] (2008), 158-171.

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Marco C Bernasconi (2008). On an Economic Approach to the Development of Flexible-Wall Shelters for Space Exploration & Utilization. *Acta Astronautica* **63**[04], 682-686.

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L Richter, MC Bernasconi, & P Coste (2000). The Study of Locomotion of Small Wheeled Rovers: The MIDD Activity. Presented at the *6th ESA Workshop on Advanced Space Technologies for Robotics and Automation (ASTRA)*, Noordwijk, December 5-7.

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1.2.3 Other Engineering Subjects

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1.2.4 Astronautics & Society

Marco C. Bernasconi and Arthur R. Woods (1993). Implementing the Space Option: Elaboration & Dissemination of a New Rationale for Space - Part I: The Rationale. Paper *IAA.8.1-93-764a* presented at the *44th International Astronautical Congress*, Graz (Austria), October 16-22.

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Marco C. Bernasconi (1994). Humanity Facing the Future: A Role for Astronautics? Paper IAA-94-IAA.8.1.708 presented at the *45th International Astronautical Congress*, Jerusalem (Israel), October 9-15.

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Marco C Bernasconi (2008). Some Motivations for Private Access to Space. Paper AA-1-2008-016/ MCBC PPH-07-068 at the *1st IAA Symposium on the Private Access to Space*, Arcachon (France), May 28-30.

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Patrick Collins & Marco Bernasconi (2011). Risk Analysis of Climate Cooling, and Potential Contribution of Snow-Melting Satellites (SMS) to Mitigation. Paper IJSTMI.

Arthur R Woods & Marco C Bernasconi (2013). www.thespaceoption.com -- A website dedicated to documenting and furthering The Space Option concept. Paper presented at the *8th IAA Symposium on the Future of Space Exploration: Towards the Stars*, Turin (Italy), July 3-5; Giancarlo Genta, Ed. *Proceedings*, 149-156.

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1.2.5 Space Art

A.R. Woods and M.C. Bernasconi (1989). The OUR Space Peace Sculpture: Introducing a Cultural Dimension into the Space Environment. Paper IAA-89-673 presented at the *40th International Astronautical Congress*, Torremolinos (Spain), October 7-13.

Arthur R. Woods and Marco C. Bernasconi (1990). The Orbiting Unification Ring - Space Peace Sculptures: Progress Report on Global Art in Space. Paper IAA-90-652 presented at the *41st International Astronautical Congress*, Dresden (Germany), October 6-11; also: *Leonardo* **24**[05], 601-606.

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Marco C Bernasconi (2009). Lights in the Sky: Membrane Structures for Art in Space. Paper presented at the *ECCOMAS Structural Membranes 2009 -- International Conference on Textile Composites & Inflated Structures IV*, Stuttgart (Germany), October 5-7; E Oñate & B Kröplin (Eds). Proceedings. CIMNE, Barcelona (Spain).

1.3 Lectures & Presentations (Public Meetings)

M.C. Bernasconi (1977). "'Fundamentals' and 'Current Developments' in Astronautics", Lecture cycles as part of the "*Euroavia Colloquium*", ETHZ, Zurich (Switzerland), May to June.

M.C. Bernasconi (1983). Inflatable, Space-Rigidized Structures - A 'No-Mechanism' Approach to Expandable Systems. Paper presented at the *1st European Space Mechanisms & Tribology Symposium*, October, Neuchatel (Switzerland).

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Marco C. Bernasconi (1989). The Lunar Base: Key to the Economic Utilization of the Solar System Resources. Abstract ID-PRP/050-289/FPP for the *IAA Symposium on Cost Reductions in Space Operations*.

Marco C Bernasconi (1989). Small Satellites: The Industrial Perspective / Presentation to the *IAA Workshop on Inexpensive Scientific Satellites*, Bordeaux, 16-20 May, 8 pp.

MC Bernasconi (1989). Large Space Structures: Rationale, Requirements & Realization - Summary of a Lecture for the 1989 ISU Session. ID-PRP/070-789/LSS, 16 pp.

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Dr Marco C Bernasconi

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Marco C Bernasconi (1992). Why Space? Keynote address at the *First European Space Art Workshop*, Montreux (Switzerland), March 21-26.

Arthur R. Woods & Marco C. Bernasconi (1992). Space and Humanity - Paper presented at the *1992 European Space Congress/ ISY Space Show*, Munich, Germany, March 31.

Marco C Bernasconi (1993). Expandable Support Structures for Large-Area Applications: The Solar Sail Case. Presentation at the *DLR Solar Sail Workshop*, Cologne-Porz (Germany), May 5.

Marco C Bernasconi (1994). A Small Solar Sail Mission to the Asteroids. Paper presented at the *Space Missions & Astrodynamics III Conference*, Turin (Italy), June 19-20.

Marco C. Bernasconi (1995). The Space Option: Its Relation to the Rationale for Astronautics, The Models for Its Urgency. Presentation to the ESA Long-Term Space Policy Committee, Paris (France), January 18.

Arthur R. Woods & Marco C. Bernasconi (1995). Choosing A Space Age Or A Stone Age / Commentary. *Space News* Oct. 2-8; also included in: Claude Nicollier & Jean-Bernard Desfayes (1996). *Aux Portes du Cosmos* (in French). LEP Editions, 200-201.

Marco C. Bernasconi (1995). Astronautics in the 21st Century: Acceptance through Synergies with the Development of a True Space Program? Presentation to the "Space 2020" Recommendations Working Group, ESTEC, Noordwijk (The Netherlands), October 24.

Marco C. Bernasconi (1995). The Survival Theme. Presentation to the "Space 2020" Recommendations Working Group, ESTEC, Noordwijk (The Netherlands), November 24.

Marco C. Bernasconi (1996). Broadening Space Utilization: The Space Resources Exploitation Theme. Presentation to the "Innovation Working Group," ESTEC, Noordwijk (The Netherlands), September 5.

Lino De Benetti, Marco C Bernasconi, Gabriele Giudice, & Giovanni Mica (Chairman) (1997). Unsustainable Civilization? (in Italian). A Round Table organized by Forum & Istituto Italiano di Cultura at Amsterdam (The Netherlands), March 21.

Lutz Richter, Marco Bernasconi, & VV Gromov (1997). Cooperative Activities of DLR & European Partners on Planetary Microrovers. Paper presented at the *DGLR/ DLR/ DARA/ Symposium on the "Exploration of the Moon & Mars - Prerequisite for Understanding Terrestrial Planets"*, Berlin (Germany), June 11-13.

Marco C Bernasconi (2002). Is Technology the Limiting Factor for Implementing the Space Option? Invited presentation at the *ASI 1st International Workshop on Futuristic Space Technologies*, Trieste (Italy), 5-7 May.

Marco C Bernasconi (2002). An Evolutionary Approach to Chemically Rigidized Expandable Structures (CRES). Presentation at the *1st European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), 21-22 May.

Marco C Bernasconi (2002). Gossamer Structures on Lightsats: Small Reflectors for Small Spacecraft. Presentation at the *1st European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), 21-22 May.

Marco C Bernasconi (2002). Flexible-Wall Expandable Structures for Space Applications: Forty Years of Trying. Presentation at the *1st European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), 21-22 May.

Marco C Bernasconi (2002). Inflatable Solar Arrays: Revolutionary Technology? -- A European Perspective. Seminar at the Institute of Microtechnology, University of Neuchatel, Neuchatel (Switzerland), December 5.

Marco C Bernasconi (2003). The Need for Standardization of the Materials for Inflatable Structures' Sublaminates. Remarks at the Inflatable Structures Working Meeting, ESTEC (The Netherlands), October 8-9.

Marco C Bernasconi (2003). Basic Materials' Development for Lightly-Loaded CRES (Chemically-Rigidized Expandable Structures). Remarks, Inflatable Structures Working Meeting, ESTEC (The Netherlands), October 8-9.

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Marco C Bernasconi (2004). Chemically Rigidized Expandable Structures (CRES): Rigidization & Materials. Presentation at the *2nd European Workshop on Inflatable Space Structures*, Tivoli (Italy), June 21-23.

Marco C Bernasconi (2004). Configurations for CRES-supported TFPV Solar Arrays. Presentation at the *2nd European Workshop on Inflatable Space Structures*, Tivoli (Italy), June 21-23.

Marco C Bernasconi & Meindert Versteeg (2004). A Review of Inflatable, Habitable Structures. Presentation at the *2nd European Workshop on Inflatable Space Structures*, Tivoli (Italy), June 21-23.

V Peypoudat, B Defoort, D Lacour, P Brassier, S Langlois, S Liénard, M Götz, & MC Bernasconi (2004). Development of a Gossamer Advanced Solar Array Breadboard. Presentation at the *2nd European Workshop on Inflatable Space Structures*, Tivoli (Italy), June 21-23.

Marco C Bernasconi (2005). Astronautics & an Ethics for the 21st Century. Presentation at the IAA *9th Space and the Arts Workshop "Space: Planetary Consciousness and the Arts"*, Yverdon-les-Bains (Switzerland), May 19-21.

Marco C Bernasconi (2006). Astronautics as an Ethical Imperative. Presentation at the OLATS *"Expanding the Space: Enlarging the Frontiers of the Earth"* Conference, Valencia (Spain), October 3-6.

Marco C Bernasconi (2006). Material Aspects for Gossamer Structures: Thin-Film Options. Presentation PPH-06-057 at the *3rd European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), October 10-12.

Marco C Bernasconi (2006). A Further Look at Rigidization Technologies: Thermal-Regime Considerations. Presentation PPH-06-058 at the *3rd European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), October 10-12.

Marco C Bernasconi (2006). A Planar Support Frame for Flight Experiment Purposes. Presentation PPH-06-059 at the *3rd European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), October 10-12.

Marco C Bernasconi, Meindert Versteeg, & Roland Zenger (2006). Auxiliary Internal Structures (AUXIS) for an Expandable Habitat. Presentation PPH-06-062 at the *3rd European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), October 10-12.

Marco C Bernasconi (2006). Folding Patterns for Gossamers' Building Blocks -- A Primer. Presentation PPH-06-064 at the *3rd European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), October 10-12.

Marco C Bernasconi (2008). Gossamers, CRES et al: Where Are We Going? Paper 4EWISS-1285396/ MCBC PPH-08-069 at the *4th European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), June 16-18.

Marco C Bernasconi & Roland Zenger (2008). SPLESA: Small Planetary-Surface Lightweight Solar Arrays. Paper 4EWISS-1285401/ MCBC PPH-08-070 at the *4th European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), June 16-18.

Marco C Bernasconi (2008). Unpressurized Orbital Hangars in Geolunar Space. Paper 4EWISS-1285403/ MCBC PPH-08-071 at the *4th European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), June 16-18.

Marco C Bernasconi (2008). Lightweight Aerobrakes for Debris Mitigation. Paper 4EWISS-1285410/ MCBC PPH-08-072 at the *4th European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), June 16-18.

Marco C Bernasconi (2008). High-Temperature-Capable Rigidizable Matrix Materials. Paper 4EWISS-1285417/ MCBC PPH-08-073 at the *4th European Workshop on Inflatable Space Structures*, ESTEC (The Netherlands), June 16-18.

Marco C Bernasconi (2008). TANSTAAFL! -or- How to Colonize Space in Seven Easy Steps. Paper PPH-08-075 at the 2nd Convention of Technologies of the Frontier, Belgirate (Italy), June 7.

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Marco C Bernasconi (2009). Astronautical Developments: For Making Earth Safer or the People More Secure? Abstract *PPH-08-077* for *ISU 13th Annual International Symposium "Space for a Safe & Secure World,"* Strasbourg (France), February 18-20.

Marco C Bernasconi (2009). The Significance of Open, General Access to Space. An astronautical seminar at the Politecnico di Milano (Italy), April 17.

Marco C Bernasconi (2010). Development Articles & Demonstrators for Rigidized Inflatables. Presentation at the Technical Meeting on Inflatable Structures, ESA/ESTEC (The Netherlands), March 23-24; *MCBC PPH-10-084*.

Marco C Bernasconi (2011). Inflatable Structures: Terrestrial Developments & Trends. *MCBC PPH-11-088* for the 5th European Workshop on Inflatable Space Structures, ESTEC (The Netherlands), 10-12 May.

Marco C Bernasconi (2011). Interleaving the Development Paths of Power-from-Space Systems & Inflatable Space Structures. *MCBC PPH-11-089* for the 5th European Workshop on Inflatable Space Structures, ESTEC (The Netherlands), 10-12 May.

Marco C Bernasconi (2013). Human Development Beyond Earth: Long-Term Perspective vs Urgency. Paper *MCBC PPH-13-097* presented at the *AIDAA Workshop "Espansione della Civiltà nello Spazio,"* Naples (Italy), March 22.

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1.4 Position Papers -- Cost Modeling & Program Planning

M.C. Bernasconi (1977). The Moon Treaty: Toward the Economic Exploitation of Lunar Resources. Paper at the "Euroavia Colloquium", February 23, ETHZ.

MC Bernasconi (1979). Comments by Contraves on Eurospace 9276. ID-RVW/291-079/FPP, 7 pp.

MC Bernasconi (1982). The European Space Policy for 2000 - Replies to the Questionnaire by A. Turcat (Eurospace Letter PG/385/82/MT). SN/FPP/02(82)RVW, 23 pp.

MC Bernasconi (1984). Which Way to Space Stations? SN/FPP/05(84)FPP, 13 pp.

Marco C Bernasconi (1990). Return to the Moon: The Role of Lunar Resources in the Development of Astronautics. *ID-PRP/050-290/FPP*.

MC Bernasconi (1992). Future Space Transportation: What Is Needed? ID-RVW/150-192/FPP, 12 pp.

MC Bernasconi (1992). Return to the Moon: Astronautics or Science? ID-RVW/270-192/FPP, 15 pp

MC Bernasconi (1992). Technology Planning at OCW: Status, Methods, and Issues. ID-QME/090-992/FPP, 16 pp.

Marco C Bernasconi (1992). Materials & Biological Sciences in Space - Is Good Science Enough? ID-MOM/201-192/FPP, 6 pp.

Marco C Bernasconi (1993). Why Space? The Rationale for Space – Leaflet with Five Charts.

Marco C Bernasconi (1993). Cost Models for Lightsats - Appendix 8 in: CJ Elliott, Chairman. European Small Satellite Initiative. A Report of the Eurospace Small Satellites Group. Eurospace, Paris.

Marco C Bernasconi (1994). Offer Management WG: Kostenschätzung-Methoden. ID-RVW/011-193/FPP.

Primary or sole author of some 16 main contractual final reports; contributor to at least four others; coordinated and contributed to more than twenty proposals to ESA.