

LIST of PUBLICATIONS

Jozef C. van der Ha

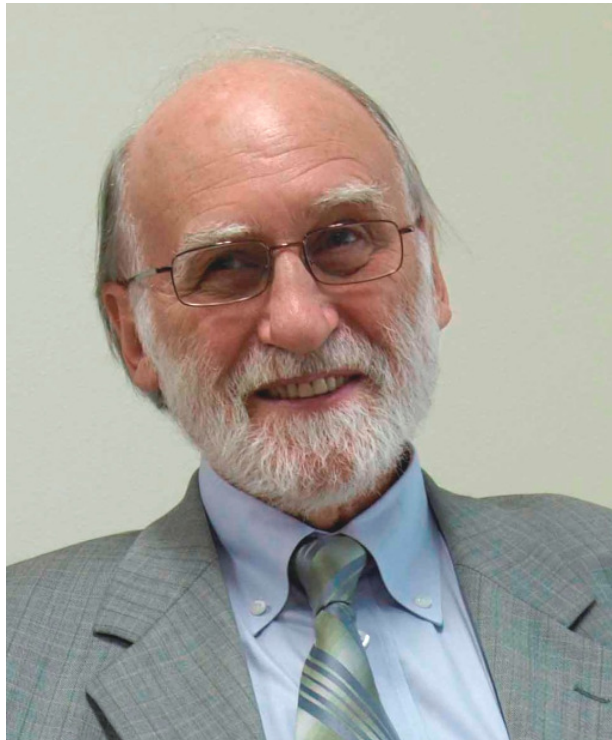
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BOOKS

BOOK of PROCEEDINGS

- *Mission Design and Implementation of Satellite Constellations*, Proceedings of an International Workshop, Toulouse, France, November 1997, Edited by J. C. van der Ha, Space Technology Proceedings, Vol. 1, Springer Scientific + Business Media. (<http://link.springer.com/book/10.1007%2F978-94-011-5088-0>)

BOOK CHAPTER

- *Reducing Space Mission Cost*, ‘Chapter 6: Reducing Mission Operations Cost’, Edited by J. R. Wertz and W. J. Larson, Space Technology Library, Vol. 6, 1996, Springer Scientific + Business Media. (<http://www.springer.com/us/book/9780792340218>)

JOURNAL PUBLICATIONS

1. (J-2015a) Janssens, F. L., and J. C. van der Ha, ‘Stability of Spinning Satellite under Axial Thrust, Internal Motion, and Damping’, *Journal of Guidance, Control, and Dynamics*, Vol. 38, Issue 4, April 2015, pp. 761-771. (<http://arc.aiaa.org/doi/abs/10.2514/1.G000123>)
 2. (J-2015b) van der Ha, J. C., Y. Mimasu, Y. Tsuda, and O. Mori, ‘Solar and Thermal Radiation Pressure Models and Flight Evaluation for IKAROS Solar Sail’, *Journal of Spacecraft & Rockets*, Vol. 52, Issue 3, May 2015, pp. 958-967. (<http://arc.aiaa.org/doi/abs/10.2514/1.A33158>)
 3. (J-2015d) van der Ha, J. C., ‘Lessons Learned from the Dynamical Behaviour of Orbiting Satellites’, 20th John V. Breakwell Memorial Keynote Lecture (Presented at 65th International Astronautical Conference, Toronto, Canada, October 1st, 2014), *Acta Astronautica*, Vol. 115, November-December 2015, pp. 121-13. (<http://www.sciencedirect.com/science/article/pii/S0094576515001769>)
 4. (J-2015c) Janssens, F. L., and J. C. van der Ha, ‘Flat-Spin Recovery of Spinning Satellites by an Equatorial Torque’, *Acta Astronautica*, Advanced Online Publication, To be Published, 2015. (<http://www.sciencedirect.com/science/article/pii/S0094576515001939>)
-
5. (J-2014a) Janssens, F.L., and J. C. van der Ha, ‘Stability of Spinning Satellite under Axial Thrust and Internal Mass Motion’, *Acta Astronautica*, Vol. 94, Issue 1, January 2014, pp. 502-514 (<http://dx.doi.org/10.1016/j.actaastro.2012.09.013>).

6. (J-2014b) van der Ha, J. C., Y. Mimasu, Y. Tsuda, and O. Mori, 'Solar and Thermal Radiation Pressure Models and Flight Evaluation for IKAROS Solar Sail', *Advances in the Astronautical Sciences, Space Flight Mechanics 2014*, Vol. 152, pp. 789-806.
7. (J-2014c) van der Ha, J. C. 'Comparison of Solar and Thermal Radiation Accelerations of Deep-Space Satellites', *Advances in the Astronautical Sciences, Space Flight Mechanics 2014*, Vol. 152, pp. 2727-2746.
8. (J-2014d) Kato, T., S. Theil, and J. C. van der Ha, 'External Torques affecting the Attitude Motion of a Mercury Orbiter', *Advances in the Astronautical Sciences, Space Flight Mechanics 2014*, Vol. 152, pp. 3475-3493.
9. (J-2014e) Janssens, F. L., and J. C. van der Ha, 'Analytical Solution for Flat Spin Recovery of Spinning Satellites', *Advances in the Astronautical Sciences, Space Flight Mechanics 2014*, Vol. 152, pp. 3495-3513.
10. (J-2014f) Janssens, F. L., and J. C. van der Ha, 'Flat-Spin Recovery of Spinning Satellites by an Equatorial Torque', *Advances in the Astronautical Sciences, Dynamics and Control of Space Systems 2014*, Vol. 153, pp. 273-292.

11. (J-2013a) Shoemaker, M., J. C. van der Ha, S. Abe, and K. Fujita, 'Trajectory Estimation of the Hayabusa Spacecraft during Atmospheric Disintegration', *Journal of Spacecraft and Rockets*, Vol. 50, Nr. 2, March-April 2013, pp. 326-336.
12. (J-2013b) Janssens, F. L., and J. C. van der Ha, 'Stability of Spinning Satellite under Axial Thrust and Internal Motion Including Damping', *Advances in the Astronautical Sciences, Space Flight Mechanics 2013*, Vol. 148, pp. 203-222.
13. (J-2013c) van der Ha, J. C., 'Free-Molecular Flow Induced Attitude Changes of Spinning Satellites in Elliptical Orbits', *Advances in the Astronautical Sciences, Space Flight Mechanics 2013*, Vol. 148, pp. 1321-1340.
14. (J-2013d) Rievers, B., T. Kato, J. C. van der Ha, and C. Laemmerzahl, 'Numerical Analysis of Thermal Radiation Perturbations for a Mercury Orbiter', *Advances in the Astronautical Sciences, Space Flight Mechanics 2013*, Vol. 148, pp. 2639-2658.

15. (J-2012a) Shoemaker, M., J. C. van der Ha, and K. Fujita, 'Trajectory Reconstruction of Hayabusa's Atmospheric Reentry', *Acta Astronautica*, Vol. 71, February 2012, pp. 151-162.
16. (J-2012b) Kato, T., and J. C. van der Ha, 'Precise Modeling of Solar and Thermal Accelerations on Rosetta', *Acta Astronautica*, Vol. 72, March 2012, pp. 165 - 177.

17. (J-2012c) Shoemaker, M., J. C. van der Ha, and T. Morley, 'Modeling and Validation of Thermal Radiation Acceleration on Interplanetary Spacecraft', *Journal of Spacecraft and Rockets*, Vol. 49, Nr. 2, March-April 2012, pp. 212-219.
18. (J-2012d) Rievers, B., T. Kato, J. C. van der Ha, and C. Laemmerzahl, 'Numerical Prediction of Satellite Surface Forces with Application to Rosetta,' *Advances in the Astronautical Sciences, Space Flight Mechanics 2012*, Vol. 143, pp. 1123-1142.
19. (J-2012e) Kato, T., B. Rievers, J. C. van der Ha, and C. Laemmerzahl, 'Sensitivity Analysis of the Non-Gravitational Perturbations on Mercury Orbiter', *Advances in the Astronautical Sciences, Space Flight Mechanics 2012*, Vol. 143, pp. 1579-1595.
20. (J-2012f) Kato, T., B. Rievers, J. C. van der Ha, and C. Laemmerzahl, 'Detailed Analysis of Solar and Thermal Accelerations on Deep-Space Satellites', *Advances in the Astronautical Sciences, Space Flight Mechanics 2012*, Vol. 143, pp. 1761-1776.
21. (J-2012g) Janssens, F., and J. C. van der Ha, 'Stability of Spinning Satellite under Axial Thrust and Internal Mass Motion', *Advances in the Astronautical Sciences, Dynamics and Control of Space Systems 2012*, Vol. 145, pp. 79-98.

22. (J-2011a) Janssens, F. L., and J. C. van der Ha, 'On the stability of Spinning Satellites', *Acta Astronautica*, Vol. 68, Nr. 7-8, April-May 2011, pp. 778-789.
23. (J-2011b) van der Ha, J. C., 'Spin-Axis Attitude Determination and Covariances in Local Sun-Earth Frame', *Journal of Guidance, Control, and Dynamics*, Vol. 34, No. 6, November-December 2011, pp. 1720-1727.

24. (J-2010a) van der Ha, J. C., 'Spin Axis Attitude Determination Using In-Flight Data', *Journal of Guidance, Control, and Dynamics*, Vol. 33, No. 3, May-June 2010, pp. 768-781.
25. (J-2010b) Shoemaker, M. A., G. Chamboredon, M. Dittmar, J. van der Ha, and K. Fujita, 'Design and Validation of a Trajectory Estimation System for the Hayabusa Sample Return Capsule', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2010*, Vol. 136, 2010, pp. 375-394.
26. (J-2010c) van der Ha, J. C., 'Calibration Technique for Attitude Manoeuvres of Spinning Satellites', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2010*, Vol. 136, 2010, pp. 1599-1610.
27. (J-2010d) van der Ha, J. C., and D. Stramaccioni, 'Thermal Radiation Effects on Deep-Space Trajectories', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2010*, Vol. 136, 2010, pp. 1861-1880.

28. (J-2010e) Mimasu, Y., J. C. van der Ha, et al., 'Estimation of Solar Radiation Pressure Parameters for Solar Sail Demonstrator IKAROS Considering Attitude Dynamics', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2010*, Vol. 136, 2010, pp. 1915-1932.
-
29. (J-2009a) van der Ha, J. C., and M. D. Shuster, 'A Tutorial on Vectors and Attitude', *IEEE Control Systems Magazine*, Vol. 29, No. 2, April 2009, pp. 94-107.
30. (J-2009b) van der Ha, J. C., 'Progress in Satellite Attitude Determination and Control', *Aeronautical and Space Sciences Japan*, Vol. 57, No. 666, July 2009, pp. 191-198.
31. (J-2009c) Tsuruda, Y., T. Hanada, and J. C. van der Ha, 'QSAT: A Low-Cost Design for 50-kg Class Piggyback Satellite', *Transactions of JSASS Space Technology Japan*, Vol.7, No. ISTS-26, pp. 7-12, 2009.
32. (J-2009d) Kato, T., J. C. van der Ha, and A. Sakurai, 'Effective Data Handling Architecture for Small Satellites', *Transactions of JSASS Space Technology Japan*, Vol.7, No. ISTS-26, pp. 13-18, 2009.
33. (J-2009e) Miyata, K., T. Narumi, and J. C. van der Ha, 'Comparison of Different Magnetorquer Control Laws for QSAT', *Transactions JSASS Space Technology Japan*, Vol. 7, No. ISTS-26, p. 43-48, 2009.
34. (J-2009f) Mimasu, Y., and J. C. van der Ha, 'Attitude Determination Concept for QSAT', *Transactions JSASS Space Technology Japan*, Vol. 7, No. ISTS-26, p. 63-68, 2009.
35. (J-2009g) van der Ha, J. C., and F. L. Janssens, 'Spin-Axis Attitude Determination from Earth Chord-Angle Variations for Geostationary Satellites', *Journal of Guidance, Control, and Dynamics*, Vol. 32, No. 5, September-October 2009, pp. 1598-1608.
36. (J-2009h) van der Ha, J. C., 'Performance of Spin-Axis Attitude Estimation Algorithms with Real Data', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2009*, Vol.134, 2009, pp. 411-430.
37. (J-2009i) Miyata, K., and J. C. van der Ha, 'Attitude Control by Magnetic Torquer', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2009*, Vol.134, 2009, pp. 1041-1060.
38. (J-2009j) Nobili, A. M., J. C. van der Ha, et al., '“Galileo Galilei” (GG): A Small Satellite to test the Equivalence Principle of Galileo, Newton and Einstein', *Experimental Astronomy*, Vol. 25, No. 1-3, pp. 17-31, 2009.
-

39. (J-2008a) van der Ha, J. C., 'The Two-Sun Cones Attitude Determination Method', *Journal of Guidance, Control, and Dynamics*, Vol. 31, No. 5, September-October 2008, pp. 1202-1209.
40. (J-2008b) van der Ha, J. C., and F. L. Janssens, 'Spin-Axis Attitude Determination from Earth Chord-Angle Variations for Geostationary Satellites', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2008*, Vol.130, Part 1, 2008, pp. 579-598.
-
41. (J-2007a) van der Ha, J. C., and V. J. Lappas, 'Long-Term Attitude Drift of Spinning Spacecraft under Solar Radiation Torques', *Journal of Guidance, Control, and Dynamics*, Vol. 30, No. 5, September-October 2007, pp. 1470-1479.
42. (J-2007b) van der Ha, J. C., 'The Two-Sun-Cones Attitude Determination Method', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2007*, Vol. 127, Part I, 2007, pp. 117-130.
-
43. (J-2006a) van der Ha, J. C., 'Spin Axis Attitude Determination Accuracy Model in the Presence of Biases', *Journal of Guidance, Control, and Dynamics*, Vol. 29, No. 4, July-August 2006, pp. 799-809.
44. (J-2006b) van der Ha, J. C., 'Models for Rhumb-Line Attitude Maneuvers and Error Propagation Effects', *Journal of Guidance, Control, and Dynamics*, Vol. 29, No. 6, November-December 2006, pp. 1384-1394.
-
45. (J-2005a) Lappas, V. L., J. C. van der Ha, S. Schwartz, C.I. Underwood, and A. da Silva Curiel, 'NACON: A Nano-Satellite Constellation for Space Weather Monitoring', *Journal of the British Interplanetary Society*, Volume 58, No. 1-2, January-February 2005, pp. 19-27.
46. (J-2005b) van der Ha, J. C., and F. L. Janssens, 'Jet Damping and Misalignment Effects during SRM Burn', *Journal of Guidance, Control, and Dynamics*, Vol. 28, No. 3, May-June 2005, pp. 412-420.
47. (J-2005c) van der Ha, J. C., 'Equal Chord Attitude Determination Method for Spinning Spacecraft', *Journal of Guidance, Control, and Dynamics*, Vol. 28, No. 5, September-October 2005, pp. 997-1005.
48. (J-2005d) van der Ha, J. C., and V. Lappas, 'Long-Term Attitude Drift of Spinning Spacecraft under Solar Radiation Torques', *Advances in the Astronautical Sciences, Astrodynamics 2005*, Vol. 123, Part II, pp. 1123-1142, 2005.

49. (J-2005e) van der Ha, J. C., 'Error Propagation Model for Rhumb-Line Attitude Maneuvers', *Advances in the Astronautical Sciences, Astrodynamics 2005*, Vol. 123, Part III, pp. 2611-2634, 2005.
-
50. (J-2004) van der Ha, J. C., 'Equal Chord Attitude Determination Method for Spinning Spacecraft', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2004*, Vol. 119, Part I, pp. 659-676, 2004.
-
51. (J-2003a) van der Ha, J. C., 'Trends in Cost-Effective Mission Operations', *Acta Astronautica*, Vol. 52, No. 2-6, January-March 2003, pp 337-342.
52. (J-2003b) van der Ha, J. C., G. Rogers, W. Dellinger, and J. Stratton, 'CONTOUR Phasing Orbits: Attitude Determination & Control Concepts & Flight Results', *Advances in the Astronautical Sciences, Spaceflight Mechanics 2003*, Vol. 114, Part II, pp. 767-781, 2003.
-
53. (J-2001) van der Ha, J. C., 'Small Satellites: Continuous Improvements in Project Management', *Advances in the Astronautical Sciences, ISCOPS 2001*, Vol. 110, pp. 257-264, 2002.
-
54. (J-1997) van der Ha, J. C., et al., 'Recent Highlights in Astrodynamics', *Acta Astronautica*, Vol. 40, No. 10, October 1997, pp. 685-692.
-
55. (J-1996) van der Ha, J. C., M. H. Marshall, and J. A. Landshof, 'Cost-Effective Mission Operations', *Acta Astronautica*, Vol. 39, No. 1-4, July 1996, pp. 61-70.
-
56. (J-1993) van der Ha, J. C., 'John V. Breakwell: Astrodynamacist and Friend', *Acta Astronautica*, Vol. 29, No. 6, June 1993, pp. 481-483.
-
57. (J-1992) van der Ha, J. C., 'Implementation of the Revised HIPPARCOS Mission at ESOC', *ESA Bulletin*, No. 69, February 1992, pp. 9-15.
-
58. (J-1990a) van der Ha, J. C., and R. Mugellesi, 'Analytical Models for Relative Motion under Constant Thrust', *Journal of Guidance, Control, and Dynamics*, Vol. 13, No. 4, July-August 1990, pp. 644-650.
59. (J-1990b) Hassan, H., M.A.C. Perryman, K. Clausen, J. van der Ha, and D. Heger, 'The HIPPARCOS Mission: On the Road to Recovery', *ESA Bulletin*, No. 64, November 1990, pp. 59-66.

60. (J-1988a) Marec, J. P., J. van der Ha, et al., 'Astrodynamics Problems of the Space Station', Acta Astronautica, Vol. 17, No. 5, May 1988, pp. 491-494.

61. (J-1988b) Marec, J. P., J. van der Ha, et al., 'Recent Progress in Astronautics', Acta Astronautica, Vol. 17, No. 10, October 1988, pp. 1049-1057.

62. (J-1987a) van der Ha, J. C., 'Initial Attitude Determination for the HIPPARCOS Satellite', Acta Astronautica, Vol. 15, No. 6/7, June-July 1987, pp. 421-433.

63. (J-1987b) van der Ha, J. C., 'The Ground Segment's Vital Role in the HIPPARCOS Scientific Mission', ESA Bulletin, No. 51, August 1987, pp. 27-33.

64. (J-1986a) Mugellesi, R., and J.C. van der Ha, 'RIT-10 Low Thrust Control of EURECA's Orbit Decay', ESA Journal, Vol. 10, No. 1, February 1986, pp. 59-70.

65. (J-1986b) van der Ha, J. C., 'Attitude Determination Covariance Analysis for Geostationary Transfer Orbits', Journal of Guidance, Control, and Dynamics, Vol. 9, No. 2, March-April 1986, pp. 156-163.

66. (J-1986c) van der Ha, J. C., 'Long-Term Evolution of Near-Geostationary Orbits', Journal of Guidance, Control, and Dynamics, Vol. 9, No. 3, May-June 1986, pp. 363-370.

67. (J-1986d) van der Ha, J. C., 'Attitude Perturbations Induced by Free-Molecular Flow Interactions in Perigee Region', Acta Astronautica, Vol. 13, No. 6/7, June-July 1986, pp. 301-309.

68. (J-1986e) van der Ha, J. C., 'Approximate Free-Molecular Flow Torques on Spinning Satellites', The Journal of the Astronautical Sciences, Vol. 34, No. 4, October-December 1986, pp. 403-419.

69. (J-1985a) van der Ha, J. C., 'Orbital and Relative Motion of a Tethered Satellite System', Acta Astronautica, Vol. 12, No. 4, April 1985, pp. 207-211.

70. (J-1985b) van der Ha, J. C., 'Non-Singular and Non-Conventional Orbit Perturbation Equations', Zeitschrift fuer Flugwissenschaften und Weltraumforschung, Vol. 9, No. 4, July-August 1985, pp. 217-224.

71. (J-1985c) van der Ha, J. C., 'Perturbation Solution of Attitude Motion under Body-Fixed Torques', Acta Astronautica, Vol. 12, No. 10, October 1985, pp. 861-869.

72. (J-1984) Beech, P., M. Soop, and J. C. van der Ha, 'The De-Orbiting of GEOS-2', ESA Bulletin, No. 38, May 1984, pp. 86-89.
-
73. (J-1982) van der Ha, J. C., 'Three-Dimensional Subsatellite Motion under Air Drag and Oblateness Perturbations', Celestial Mechanics, Vol. 26, No. 3, March 1982, pp. 285-309.
-
74. (J-1981) Hechler, M., and J. C. van der Ha, 'Probability of Collisions in the Geostationary Ring', Journal of Spacecraft and Rockets, Vol. 18, No. 4, July-August 1981, pp. 361-366.
-
75. (J-1980a) van der Ha, J. C., 'Exact Analytical Formulation of Planar Relative Motion', Acta Astronautica, Vol. 7, No. 1, January 1980, pp. 1-17.
76. (J-1980b) Hechler, M., and J. C. van der Ha, 'The Probability of Collisions on the Geostationary Ring', ESA Journal, Vol. 4, No. 3, August 1980, pp. 277-286 (J-1981).
-
77. (J-1979a) van der Ha, J. C., and V. J. Modi, 'On the Maximization of Orbital Momentum and Energy using Solar Radiation Pressure', The Journal of the Astronautical Sciences, Vol. 27, No. 1, January-March 1979, pp. 63-84.
78. (J-1979b) van der Ha, J. C., and V. J. Modi, 'Long-Term Evaluation of Three-Dimensional Heliocentric Solar Sail Trajectories with Arbitrary Fixed Sail Setting', Celestial Mechanics, Vol. 19, No. 2, February 1979, pp. 113-138.
-
79. (J-1978) van der Ha, J. C., and V. J. Modi, 'Orbital Perturbations and Control by Solar Radiation Forces', Journal of Spacecraft and Rockets, Vol. 15, No. 2, March-April 1978, pp.105-112.
-
80. (J-1977a) van der Ha, J. C., and V. J. Modi, 'Long-Term Solar Radiation Effects upon an Orbit in the Ecliptic', Acta Astronautica, Vol. 4, No. 7/8, July-August 1977, pp. 813- 831.
81. (J-1977b) van der Ha, J. C., and V. J. Modi, 'Analytical Evaluation of Solar Radiation Induced Orbital Perturbations of Space Structures', The Journal of the Astronautical Sciences, Vol. 25, No. 4, October-December 1977, pp. 283-306.

CONFERENCE PUBLICATIONS

1. (C-2015a) van der Ha, J. C. 'Lessons Learned from the Dynamical Behavior of Orbiting Satellites', 30th International Symposium on Space Technology and Science, Kobe, Japan, July 4-10, 2015, Paper ISTS-2015-d22.
-

2. (C-2014a) van der Ha, J. C., Y. Mimasu, Y. Tsuda, and O. Mori, 'Solar and Thermal Radiation Pressure Models and Flight Evaluation for IKAROS Solar Sail', 24th AAS/AIAA Space Flight Mechanics Meeting, Santa Fe, NM, January 27-30, 2014, Paper AAS-14-244.

3. (C-2014b) van der Ha, J. C. 'Comparison of Solar and Thermal Radiation Accelerations of Deep-Space Satellites', 24th AAS/AIAA Space Flight Mechanics Meeting, Santa Fe, NM, January 27-30, 2014, Paper AAS-14-397.

4. (C-2014c) Kato, T., S. Theil, and J. C. van der Ha, 'External Torques Affecting the Attitude Motion of a Mercury Orbiter', 24th AAS/AIAA Space Flight Mechanics Meeting, Santa Fe, NM, January 27-30, 2014, Paper AAS-14-452.

5. (C-2014d) Janssens, F. L., and J. C. van der Ha, 'Analytical Solution for Flat Spin Recovery of Spinning Satellites', 24th AAS/AIAA Space Flight Mechanics Meeting, Santa Fe, NM, January 27-30, 2014, Paper AAS-14-453.

6. (C-2014e) Janssens, F. L., and J. C. van der Ha, 'Flat-Spin Recovery of Spinning Satellites by an Equatorial Torque', 2nd IAA / AAS Conference on Dynamics and Control of Space Systems, Roma, Italy, March 24-26, 2014, Paper IAA-AAS-DYCoSS2-14-04-04.

7. (C-2014f) van der Ha, J. C., 'Lessons Learned from the Dynamical Behaviour of Orbiting Satellites', 20th John V. Breakwell Memorial Keynote Lecture, 65th International Astronautical Congress, Toronto, Canada, September 28 - October 3, 2014, Paper IAC-14-C1.4.1.
-

8. (C-2013a) Janssens, F. L., and J. C. van der Ha, 'Stability of Spinning Satellite under Axial Thrust and Internal Motion Including Damping', 23rd AAS/AIAA Space Flight Mechanics Meeting, Kauai, HI, February 10 - 14, 2013, Paper AAS-13-214.

9. (C-2013b) van der Ha, J. C., 'Free-Molecular Flow Induced Attitude Changes of Spinning Satellites in Elliptical Orbits', 23rd AAS/AIAA Space Flight Mechanics Meeting, Kauai, HI, February 10-14, 2013, Paper AAS-13-290.

10. (C-2013c) Rievers, B., T. Kato, J. C. van der Ha, and C. Laemmerzahl, 'Numerical Analysis of Thermal Radiation Perturbations for a Mercury Orbiter', 23rd AAS/ AIAA Space Flight Mechanics Meeting, Kauai, HI, February 10-14, 2013, Paper AAS-13-371.
11. (C-2013d) van der Ha, J. C., 'Free-Molecular Flow Induced Attitude Changes of Spinning Satellites in Elliptical Orbits', 29th International Symposium on Space Technology and Science, Nagoya, Japan, June 2-8, 2013, Paper ISTS-2013-d-11.
12. (C-2013e) van der Ha, J. C., 'Solar and Thermal Radiation Pressure Models & Flight Evaluation for IKAROS Solar Sail', 29th International Symposium on Space Technology and Science, Nagoya, Japan, June 2-8, 2013, Paper ISTS-2013-d-50.

13. (C-2012a) Shoemaker, M.A., J. C. van der Ha, S. Abe, and K. Fujita, 'Trajectory Estimation of the Hayabusa Spacecraft during Atmospheric Disintegration', 50th AIAA Aerospace Sciences Meeting, Nashville, TN, January 9-12, 2012, Paper AIAA 2012-1298.
14. (C-2012b) Rievers, B., T. Kato, J. C. van der Ha, and C. Laemmerzahl, 'Numerical Prediction of Satellite Surface Forces with Application to Rosetta,' 22nd AAS / AIAA Space Flight Mechanics Meeting, Charleston, NC, January 29 - February 2, 2012, Paper AAS-12-180.
15. (C-2012c) Kato, T., B. Rievers, J. C. van der Ha, and C. Laemmerzahl, 'Sensitivity Analysis of the Non-Gravitational Perturbations on Mercury Orbiter', 22nd AAS / AIAA Space Flight Mechanics Meeting, Charleston, NC, January 29 - February 2, 2012, Paper AAS-12-208.
16. (C-2012d) Kato, T., B. Rievers, J. C. van der Ha, and C. Laemmerzahl, 'Detailed Analysis of Solar and Thermal Accelerations on Deep-Space Satellites', 22nd AAS / AIAA Space Flight Mechanics Meeting, Charleston, NC, January 29 - February 2, 2012, Paper AAS-12-219.
17. (C-2012e) Janssens, F., and J. C. van der Ha, 'Stability of Spinning Satellite under Axial Thrust and Internal Mass Motion', 1st IAA /AAS Conference on Dynamics and Control of Space Systems, Porto, Portugal, March 19-21, 2012, Paper IAA-AAS-DYCoSS1-01-07.

18. (C-2011a) van der Ha, J. C., 'Model for Thermal Radiation Recoil Accelerations of Interplanetary Satellites', 28th International Symposium on Space Technology and Science, Okinawa, Japan, June 5-12, 2011, Paper ISTS-2011-d-55.
19. (C-2011b) Sugimoto, Y., and J. C. van der Ha, 'Thermal Radiation Modeling for Interplanetary Spacecraft Orbit Propagation', 28th International Symposium on Space Technology and Science, Okinawa, Japan, June 5-12, 2011, Paper ISTS-2011-d-57.

20. (C-2011c) Dittmar, M., and J. C. van der Ha, 'Solution for Relative Planar V-Bar Transfers under Arbitrary Finite Thrust Arcs', 28th International Symposium on Space Technology and Science, Okinawa, Japan, June 5-12, 2011, Paper ISTS-2011-d-24.

21. (C-2010a) Shoemaker, M. A., G. Chamboredon, M. Dittmar, J. van der Ha, and K. Fujita, 'Design and Validation of a Trajectory Estimation System for the Hayabusa Sample Return Capsule', 20th AAS /AIAA Space Flight Mechanics Symposium, San Diego, CA, February 14-18, 2010, Paper AAS-10-125.

22. (C-2010b) van der Ha, J. C., 'Calibration Technique for Attitude Manoeuvres for Spinning Satellites', 20th AAS /AIAA Space Flight Mechanics Symposium, San Diego, CA, February 14-18, 2010, Paper AAS-10-209.

23. (C-2010c) van der Ha, J. C., and D. Stramaccioni, 'Thermal Radiation Effects on Deep-Space Trajectories', 20th AAS /AIAA Space Flight Mechanics Symposium, San Diego, CA, February 14-18, 2010, Paper AAS-10-226.

24. (C-2010d) Mimasu, Y., J. C. van der Ha, et al., 'Estimation of Solar Radiation Pressure Parameters for Solar Sail Demonstrator IKAROS Considering Attitude Dynamics', 20th AAS /AIAA Space Flight Mechanics Symposium, San Diego, CA, February 14-18, 2010, Paper AAS-10-231.

25. (C-2010e) Sugimoto, S., J. C. van der Ha, and B. Rievers, 'Thermal Model for the Rosetta Spacecraft', AIAA /AAS Guidance, Navigation, and Control Conference, Toronto, Canada, August 2-5, 2010, Paper AIAA-10-7659.

26. (C-2010f) Shoemaker, M.A., J. C. van der Ha, and T. Morley, 'Reconstruction of Rosetta Thermal Effects Using Orbit Determination Results', AIAA /AAS Guidance, Navigation, and Control Conference, Toronto, Canada, August 2-5, 2010, Paper AIAA-10-8263.

27. (C-2010g) Badrakalimuthu, A. S., V. J. Lappas, and J. C. van der Ha, 'Autonomous Attitude Determination and Control for Planetary Penetrator Missions', AIAA /AAS Guidance, Navigation, and Control Conference, Toronto, Canada, August 2-5, 2010, Paper AIAA-10-8345.

28. (C-2010h) Yokota, K., T. Narumi, K. Miyata, and J. C. van der Ha, 'Precise Attitude Control System of Small Satellite', Dynamics and Design Conference, Nara, Japan, September 14-18, 2010, pp. 268 - 273 (in Japanese).

29. (C-2010i) Shoemaker, M., J. C. van der Ha, and K. Fujita, 'Trajectory Reconstruction of Hayabusa's Atmospheric Reentry', 61st International Astronautical Conference, Prague, Czechia, September 27 - October 1, 2010, Paper IAC-10.C1.6.1.

30. (C-2010j) Kato, T., and J. C. van der Ha, 'Precise Modelling of Solar and Thermal Accelerations on Rosetta', 61st International Astronautical Conference, Prague, Czechia, September 27 - October 1, 2010, Paper IAC-10.C1.6.2.
31. (C-2010k) Miyata, K., and J. C. van der Ha, 'Proximity Navigation for Asteroid Mission Using CCD Imager', 61st International Astronautical Conference, Prague, Czechia, September 27 - October 1, 2010, Paper IAC-10.C1.6.5.
32. (C-2010l) Yokota, K., T. Narumi, K. Miyata, and J. C. van der Ha, 'Precise Attitude Control System of Earth Observation Satellite QSAT-EOS', 54th Symposium on Space Science and Technology (UKAREN), Nakajimaya, Japan, November 17 -19, 2010, Paper 2I09, JSASS-2010-4357 (in Japanese).
-
33. (C-2009a) van der Ha, J. C., 'Performance of Spin Axis Attitude Estimation Algorithms with Real Data', 19th AAS /AIAA Space Flight Mechanics Symposium, Savannah, GA, February 8-12, 2009, Paper AAS-09-127.
34. (C-2009b) Miyata, K., and J. C. van der Ha, 'Attitude Control using Magnetorquers', 19th AAS /AIAA Space Flight Mechanics Symposium, Savannah, GA, February 8-12, 2009, Paper AAS-09-169.
35. (C-2009c) van der Ha, J. C. 'Can Thermal Radiation Serve as Explanation for the Flyby Anomaly?', Investigation of the Flyby Anomaly Workshop, International Space Science Institute (ISSI), Bern, Switzerland, March 2-6, 2009 (Slides).
36. (C-2009d) van der Ha, J. C., 'Model for Determination of Spin-axis Attitude and its Covariances', 27th International Symposium on Space Technology and Science, Tsukuba, Japan, July 6-10, 2009, Paper 2009-d-12.
37. (C-2009e) Tsuruda, Y., Hanada, T., and J. C. van der Ha, 'System Design and Project Management for University Satellites', 27th International Symposium on Space Technology and Science, Tsukuba, Japan, July 6-10, 2009, Paper 2009-t-05.
38. (C-2009f) van der Ha, J. C., 'Calibration Technique for Attitude Maneuvers of Spinning Satellites', Proceedings of 19th Workshop on Astrodynamics and Flight Mechanics, ISAS/JAXA, Sagamihara, Japan, July 30-31, 2009, pp. 295-302.
39. (C-2009g) van der Ha, J. C., 'Kalman Filter Unit-Vector Attitude Determination of Spin-Stabilized Satellites', Proceedings of 19th Workshop on Astrodynamics and Flight Mechanics, ISAS/JAXA, Sagamihara, Japan, July 30-31, 2009, pp. 314-321.
40. (C-2009h) Shoemaker, M., and J. C. van der Ha, 'Trajectory Estimation of Hayabusa Sample Return Capsule Using Optical Sensors', Proceedings of 19th Workshop on Astrodynamics and Flight Mechanics, ISAS/JAXA, Sagamihara, Japan, July 30-31, 2009, pp. 269-276.

41. (C-2009i) Miyazaki, K., T. Kato, Y. Mimasu, Y. Tsuruda, and J. C. van der Ha, 'Development of COTS-based Sensor Unit for Attitude Determination', 54th Symposium on Space Science and Technology (UKAREN), Kyoto, Japan, September 2009 (in Japanese).
 42. (C-2009j) Janssens, F. L., and J. C. van der Ha, 'On the Stability of Spinning Satellites', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC-09.C1.6.2.
 43. (C-2009k) Miyata, K., and J. C. van der Ha, 'Low-cost Asteroid Mission Opportunities Using Gravity-Assist', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC-09.C1.5.5.
 44. (C-2009l) Kato, T., and J. C. van der Ha, 'Orbit Acquisition and Station-Keeping in Sun-Synchronous Orbit Using Solar radiation Pressure', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC-09.C1.4.1.
 45. (C-2009m) Mimasu, Y., J. C. van der Ha, et al., 'Solar Radiation Pressure Model for Attitude Motion of Hayabusa in Return Cruising', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC-09.C1.9.9.
 46. (C-2009n) Shoemaker, M., and J. C. van der Ha, 'Trajectory Estimation of Hayabusa Sample Return Capsule Using Optical Sensors', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC-09.C1.11.9.
 47. (C-2009o) Tsuruda, Y., M. Shoemaker, S. Onishi, T. Yasaka, T. Hanada, and J. C. van der Ha, 'Low-Cost Small Satellite System for Electro-Dynamic Tether Demonstration Mission', 60th International Astronautical Conference, Daejeon, S. Korea, October 12-16, 2009, Paper IAC09.B4.4.12.
 48. (C-2009p) Yokota, K., T. Narumi, K. Miyata, and J. C. van der Ha, 'Attitude Control for Small Satellite Pointing Inertial Frame by Magnetorquer', Proceedings of the JSASS Symposium on Astronautics and Space Sciences, Western Branch, Kitakyushu, Japan, December 2009, Paper F-1-3, pp. 223-226 (in Japanese).
 49. (C-2009q) M. Shoemaker, and J. C. van der Ha, 'Observation and Image Processing System for Trajectory Estimation of the Hayabusa Reentry Capsule', Proceedings of the Japan Society for Aeronautical and Space Sciences, Western Branch, Kitakyushu, Japan, December 2009, pp. 13-14 (in Japanese).
-
50. (C-2008a) van der Ha, J. C., and F. L. Janssens, 'Spin-Axis Attitude Determination from Earth Chord-Angle Variations for Geostationary Satellites', 18th AAS /AIAA Space Flight Mechanics Meeting, Galveston, TX, January 27-31, 2008.

51. (C-2008b) Mimasu, Y., and J. C. van der Ha, 'Attitude Determination Concept for QSAT', 26th International Symposium on Space Technology and Science, Hamamatsu, Japan, June 2-6, 2008, Paper 2008-d-13.
 52. (C-2008c) Miyata, K., T. Narumi, and J. C. van der Ha, 'Comparison of Different Magnetorquer Control Laws for QSAT', 26th International Symposium on Space Technology and Science, Hamamatsu, Japan, June 2-6, 2008, Paper 2008-d-49.
 53. (C-2008d) Terauchi, M., I. Kim, T. Hanada, and J. C. van der Ha, 'Effect of Thermal Radiation Force for Trajectory during Swing-by', 26th International Symposium on Space Technology and Science, Hamamatsu, Japan, June 2-6, 2008, Paper 2008-d-60.
 54. (C-2008e) Tsuruda, Y., T. Hanada, and J. C. van der Ha, 'QSAT A Low-Cost Design for 50 kg Class Piggyback Satellite', 26th International Symposium on Space Technology and Science, Hamamatsu, Japan, June 2-6, 2008, Paper 2008-f-20.
 55. (C-2008f) Kato, T., A. Sakurai, and J. C. van der Ha, 'Effective Data Handling Architecture for Small Satellites', 26th International Symposium on Space Technology and Science, Hamamatsu, Japan, June 2-6, 2008, Paper 2008-f-27.
 56. (C-2008g) Mimasu, Y., T. Narumi, and J. C. van der Ha, 'Attitude Determination by Magnetometer and Gyros during Eclipse', AIAA /AAS Astrodynamics Specialist Conference, Honolulu, HI, August 18-21, 2008, Paper AIAA-2008-6932.
 57. (C-2008h) Badrakalimuthu, A., V. Lappas, and J. C. van der Ha, 'Autonomous Attitude Determination of a Lunar Penetrator using Sun Sensor', 59th International Astronautical Conference, Glasgow, UK, September 29 - October 3, 2008, Paper IAC-08-B4.2.11.
 58. (C-2008i) Uryu, A., J. C. van der Ha, H.-P. Roeser, and Y. Kuwahara, 'QSAT Mission Analysis and Operations Plan Design', 59th International Astronautical Conference, Glasgow, UK, September 29 - October 3, 2008, Paper IAC-08-B4.3.7.
 59. (C-2008j) Ikeda, H., J. C. van der Ha, T. Kominato, M. Matsuoka, T. Ohnishi, and M. Yoshikawa, 'Orbit Determination of Hayabusa Spacecraft during Close Proximity Phase', 59th International Astronautical Conference, Glasgow, UK, September 29 - October 3, 2008, Paper IAC-08-C1.3.2.
 60. (C-2008k) Miyata, K., Mimasu, Y., and J. C. van der Ha, 'Attitude Control System for QSAT', Proceedings of the JSASS (Western Branch) Symposium on Astronautics and Space Sciences, Fukuoka, Japan, November 14, 2008, pp. 41-44 (in Japanese).
-
61. (C-2007a) van der Ha, J. C., 'The Two-Sun-Cones Attitude Determination Method', 17th AAS/ AIAA Space Flight Mechanics Meeting, Sedona, AZ, January 28 - February 1, 2007, Paper AAS-07-106.

62. (C-2007b) van der Ha, J. C, ‘Astrodynamics is Worldwide’, 17th Workshop on Astrodynamics and Flight Mechanics, Keynote Lecture, ISAS/JAXA, Sagamihara, Japan, July 23-24, 2007 (Slides).
63. (C-2007c) Mimasu, Y., K. Miyata, T. Narumi, and J. C. van der Ha, ‘Attitude Determination and Control System for QSAT’, Proceedings of 17th Workshop on JAXA Astrodynamics and Flight Mechanics, ISAS/JAXA, Sagamihara, Japan, July 23-24, 2007, pp. 30-34.
64. (C-2007d) van der Ha, J. C, ‘Efficient Attitude Representations and Formulations’, Proceedings of 17th Workshop on JAXA Astrodynamics and Flight Mechanics, ISAS/JAXA, Sagamihara, Japan, July 23-24, 2007, pp. 58-62.
65. (C-2007e) Kato, T., J. C. van der Ha, et al., ‘QSAT: Kyushu Satellite for Polar Plasma Observation’, Proceedings of 2007 JSASS-KSAS Joint International Symposium on Aerospace Engineering, Kitakyushu, Japan, October 10-12, 2007, pp. 40-43.
66. (C-2007f) Mimasu, Y., J. C. van der Ha, and F. Janssens, ‘Spin-Axis Attitude Determination using Only Earth Sensor’, Proceedings of 2007 JSASS-KSAS Joint International Symposium on Aerospace Engineering, Kitakyushu, Japan, October 10-12, 2007, pp. 160-163.
67. (C-2007g) Kim, I., M. Terauchi, J. C. van der Ha, and F. Janssens, ‘Analysis of Gravity Assist around the Earth’, Proceedings of 2007 JSASS-KSAS Joint International Symposium on Aerospace Engineering, Kitakyushu, Japan, October 10-12, 2007, pp. 168-171.
68. (C-2007h) Miyata, K., Y. Mimasu, T. Narumi, H. Hirayama, and J. C. van der Ha, ‘Attitude Control by Magnetic Torquer for Small Satellite’, Proceedings of 2007 JSASS-KSAS Joint International Symposium on Aerospace Engineering, Kitakyushu, Japan, October 10-12, 2007, pp. 256-259.
69. (C-2007i) Terauchi, M., I. Kim, T. Hanada, and J. C. van der Ha, ‘Effect of Radiation for Trajectory during Swing-by’, Proceedings of 2007 JSASS-KSAS Joint International Symposium on Aerospace Engineering, Kitakyushu, Japan, October 10-12, 2007, pp. 264-267.
-
70. (C-2006a) Silas-Guilherme, M., S. Theil, and J. C. van der Ha, ‘Gravitational Quadrupolar Coupling and Center of Gravity: Application to Drag-Free Satellites’, 36th COSPAR Scientific Assembly, Beijing, China, July 16-23, 2006.
71. (C-2006b) Lappas, V., B. Wie., and J. C. van der Ha, ‘Agile Maneuvers for Near Earth Object (NEO) Fly-by Missions’, Proceedings of the First Workshop on Innovative System Concepts, Noordwijk, the Netherlands, February 21, 2006, ESA SP-633, August 2006, pp. 65-72; Also: ESA Acta Futura 2, ACT-BOK-AF02, pp. 70-77.

72. (C-2006c) van der Ha, J. C., 'Spacecraft Attitude Determination and Control', Keynote Lecture, Proceedings of the JSASS (Western Branch) Symposium on Astronautics and Space Sciences, Fukuoka, Japan, November 17, 2006, pp. 1-14, 2006.
73. (C-2006d) Miyata, K., H. Hirayama, T. Hanada, and J. C. van der Ha, 'Model for Gravity Effect on Satellite of Arbitrary Shape', Proceedings of the JSASS (Western Branch) Symposium on Astronautics and Space Sciences, Fukuoka, Japan, November 17, 2006, pp. 27-30.
74. (C-2006e) Mimasu, Y., T. Narumi, H. Hirayama, T. Hanada, and J. C. van der Ha, 'The Next 100 years Projection of Debris in GEO with GEODEEM', Proceedings of the JSASS (Western Branch) Symposium on Astronautics and Space Sciences, Fukuoka, Japan, November 17, 2006, pp. 129-132.
-
75. (C-2005a) van der Ha, J. C., and V. J. Lappas, 'Long-Term Attitude Drift of Spinning Spacecraft under Solar Radiation Torques', AAS /AIAA Astrodynamics Conference, Lake Tahoe, CA, August 7-11, 2005, Paper AAS-05-325.
76. (C-2005b) van der Ha, J. C., 'Error Propagation Model for Rhumb-Line Attitude Maneuvers', AAS /AIAA Astrodynamics Conference, Lake Tahoe, CA, August 7-11, 2005, Paper AAS-05-415.
77. (C-2005c) van der Ha, J. C., and V. J. Lappas, 'Autonomous Attitude Determination and Control of Low-Cost Deep Space Probe', Proceedings of the 6th IAA International Conference on Low-Cost Planetary Missions, Kyoto, Japan, October 11-13, 2005, pp. 169-176, 2005.
78. (C-2005d) Lappas, V. J., G. Prassinis, J. C. van der Ha, and B. Wie, 'Autonomous Attitude Determination and Control for Low-Cost Deep Space Probes', Proceedings of 6th International ESA Conference on Guidance, Navigation, and Control Systems, Loutraki, Greece, October 17-20, 2005, ESA SP 606, pp. 269-278.
-
79. (C-2004) van der Ha, J. C., 'Equal Chord Attitude Determination Method for Spinning Spacecraft', 14-th AAS /AIAA Space Flight Mechanics Meeting, Wailea, Hawaii, February 8-12, 2004, Paper AAS-04-145.
-
80. (C-2003a) van der Ha, J. C., G. Rogers, W. Dellinger, and J. Stratton, 'CONTOUR Phasing Orbits: Attitude Determination & Control Concepts & Flight Results', 13th AAS /AIAA Space Flight Mechanics Meeting, Ponce, Puerto Rico, February 9-13, 2003, Paper AAS-03-150.
81. (C-2003b) van der Ha, J. C., and F. L. Janssens, 'Jet Damping and Misalignment Effects during SRM Burn', AIAA Guidance & Control Conference, Austin, TX, August 11-14, 2003, Paper AIAA-2003-5328.

82. (C-2003c) van der Ha, J. C., 'Spin Axis Attitude Determination Accuracy Model', 54th IAF Congress, Bremen, Germany, September 29 - October 3, 2003, Paper IAC-03-A.5.08.

83. (C-2001a) Reynolds, E., J. C. van der Ha, et al. 'Use of Hibernation Modes for Deep Space Missions as a Method to Lower Operations Cost', 15th Small Satellite Symposium, Logan, Utah, August 13-16, 2001, Paper SSC01-VIIIa-5.

84. (C-2001b) van der Ha, J. C., 'Small Satellites: Continuous Improvements in Project Management', 9th International Space Conference of Pacific-Basin Societies (ISCOPS), Pasadena, CA, USA, November 14-16, 2001.

85. (C-2001c) Dunham, D., J. C. van der Ha, et al., 'CONTOUR's Phasing Orbits Design - Implementation of the Indirect Launch Mode', 16th Flight Dynamics Symposium, Pasadena, CA, December 3-7, 2001.

86. (C-2000a) van der Ha, J. C., 'Trends in Cost-Effective Mission Operations', 4th IAA International Conference on Low-Cost Planetary Missions', Laurel, MD, USA, May 2-5, 2000, Paper IAA-2000-0801.

87. (C-2000b) van der Ha, J. C., 'A Review of Recent Developments in Small Satellites', Keynote Lecture, 22nd International Symposium on Space Technology and Science (ISTS), Morioka, Japan, May 28-June 1, 2000, Paper ISTS-2000-Keynote-01V.

88. (C-2000c) van der Ha, J. C., 'Small Satellites: Characteristics & Benefits', Keynote Lecture, 44th JSASS Symposium on Space Science & Technology, ACROS, Fukuoka, Japan, October 15-17, 2000.

89. (C-1998) van der Ha, J. C., 'Lessons Learned from Small Satellite System Design and Operations', Proceedings of 21st International Symposium on Space Technology and Science, Omiya, Japan, May 24-31, 1998, Paper ISTS 98-e-03V.

90. (C-1997) Teston, F., Creasey, R., and J. C. van der Ha, 'PROBA: ESA's Autonomy and Technology Mission', 48th IAF Congress, Turin, Italy, October 6-10, 1997, Paper IAA-97-11.3.05.

91. (C-1996a) van der Ha, J. C., M. H. Marshall, and J. A. Landshof, 'Cost-Effective Mission Operations', 2nd IAA International Conference on Low-Cost Planetary Missions, JHU/APL, Laurel, MD, USA, April 16-19, 1996, Paper IAA-L-0301.

92. (C-1996b) van der Ha, J. C., 'Operations Concept Definition within the System Engineering Process', Proceedings of the 3rd CNES International Symposium on Small Satellite Systems & Services', Annecy, France, June 24-28, 1996, Paper 96/5/7.
93. (C-1996c) van der Ha, J. C., 'Lessons Learned from Small Satellite System Design and Operations', Proceedings of Conferencia Internacional sobre Pequenos Satelites: Misiones y Tecnologia, INTA, Madrid, Spain, September 9-13, 1996, pp. 67-76.
94. (C-1996d) van der Ha, J. C., 'Lessons Learned from Small Satellite System Design and Operations', Small Space Projects Management Workshop, Instituto Mexicano de Comunicaciones, Mexico City, December 2-3, 1996 (Slides).
-
95. (C-1995) van der Ha, J. C., and R. W. Farquhar, 'The NEAR Earth Asteroid Rendezvous Mission', Proceedings of the 15th Canadian Congress of Applied Mechanics (CANCAM), Victoria, B. C., Canada, May 28-June 2, 1995, pp. 150-151.
-
96. (C-1994) Oberto, J. M., and J. C. van der Ha, 'Ground Segment and Operations Concepts of Small Satellite Missions', International Symposium on Spacecraft Ground Control & Flight Dynamics, Sao Jose, Brazil, February 7-11, 1994 (Only in Paper).
97. (C-1993) Oberto, J. M., and J. C. van der Ha, 'Ground Segment and Operations Concepts of Small Satellite Missions', 44th IAF Conference, Graz, Austria, October 17-23, 1993, Paper IAA-93-D.1.119 (Only in Paper).
-
98. (C-1991a) van der Ha, J. C., 'A Tribute to John Breakwell - the Astrodynamacist', 42nd IAF Conference, Montreal, Canada, October 5-12, 1991, IAF Astrodynamics Symposium Special Session (J-1993).
99. (C-1991b) van der Ha, J. C., 'Analytical Solutions for Fuel-Optimal Rendezvous by Finite Thrust Arcs', 42nd IAF Conference, Montreal, Canada, October 5-12, 1991, Paper IAF 91-363.
-
100. (C-1989) van der Ha, J. C., 'HIPPARCOS Operations Concept: Implementation, Testing, and First Results', 40th IAF Conference, Malaga, Spain, October 7-12, 1989, Paper IAF 89-019.
-
101. (C-1988a) van der Ha, J. C., 'Implementation and Validation of HIPPARCOS Payload Support', Proceedings of the 2nd Colloquium on Scientific Aspects of the HIPPARCOS Input Catalogue Preparation, Sitges, Spain, January 25-29, 1988, pp. 121-134.

102. (C-1988b) van der Ha, J. C., and R. Mugellesi, 'Analytical Models for Relative Motion under Constant Thrust', Proceedings of AIAA /AAS Astrodynamics Conference, Minneapolis, MI, USA, August 15-17, 1988, pp. 636-644 (J-1990a).
103. (C-1988c) van der Ha, J. C., 'Analytical Formulation for Finite Thrust Rendezvous Trajectories', 39th IAF Conference, Bangalore, India, October 8-15, 1988, Paper IAF 88-308.
-
104. (C-1986a) van der Ha, J. C., 'Initial Attitude Determination for the HIPPARCOS Satellite', 37th IAF Conference, Innsbruck, Austria, October 4-11, 1986, Paper IAF 86-241 (J-1987a).
105. (C-1986b) van der Ha, J. C., and S. Caldwell, 'HIPPARCOS Precise Attitude Determination: A Balance between On-Board and On-Ground Capabilities', Proceedings of the 2nd International Symposium on Spacecraft Flight Dynamics, Darmstadt, Germany, October 20-24, 1986, pp. 385-393.
106. (C-1986c) Davies, P. D., and J. C. van der Ha, 'Real-Time Payload Monitoring of the HIPPARCOS Satellite', Proceedings of 3rd FAST Thinkshop, Bari, Italy, November 3-6, 1986, pp. 325-341.
-
107. (C-1985a) van der Ha, J. C., 'Attitude Perturbations Induced by Free-Molecular Flow Interactions in Perigee Region', 36th IAF Conference, Stockholm, Sweden, October 6-12, 1985, Paper IAF 85-232 (J-1986d).
108. (C-1985b) Mugellesi, R., and J.C. van der Ha, 'RIT-10 Low Thrust Control of EURECA's Orbit Decay', 36th IAF Conference, Stockholm, Sweden, October 6-12, 1985, Paper IAF 85-245 (J-1986a).
109. (C-1985c) van der Ha, J. C., 'Operational Implementation of De-Orbiting Manoeuvres', Proceedings of the International Conference on Space Dynamics for Geostationary Satellites, CNES, Toulouse, France, October 28-31, 1985, pp. 553-562.
-
110. (C-1984a) van der Ha, J. C., 'Attitude Determination Covariance Analysis for Geostationary Transfer Orbits', Proceedings of the AIAA Guidance & Control Conference, Seattle, WA, USA, August 20-22, 1984, Paper AIAA 84-1882 (J-1986b).
111. (C-1984b) van der Ha, J. C., 'Perturbation Solution of Attitude Motion under Body-Fixed Torques', 35th IAF Conference, Lausanne, Switzerland, October 7-13, 1984, Paper IAF 84-357 (J-1985c).
-

112. (C-1983) van der Ha, J. C., 'Orbital and Relative Motion of a Tethered Satellite System', 34th IAF Conference, Budapest, Hungary, October 9-15, 1983, Paper IAF 83-320 (J-1985a).
-
113. (C-1982) van der Ha, J. C., R. A. Broucke, and W. Presler, 'Application of Automated Algebraic Manipulation to Canonical Perturbation Problems', Proceedings of AFCET Symposium on Mathematics for Computer Science, Paris, France, March 16-18, 1982, pp. 439-448.
-
114. (C-1981a) Bird, A. G., L. Fraiture, J. C. van der Ha, and P. Kohler, 'The Dynamic Attitude Reconstitution Method', Proceedings of the 1st International Symposium on Spacecraft Flight Dynamics, Darmstadt, Germany, May 18-22, 1981, pp. 353-360.
115. (C-1981b) van der Ha, J. C., and M. Hechler, 'The Collision Probability of Geostationary Satellites', 32nd IAF Conference, Rome, Italy, September 6-12, 1981, Paper IAF 81-332 (J-1981).
-
116. (C-1980) van der Ha, J. C., 'Die Erreichbarkeit der Himmelskoerper mit Hilfe eines Sonnen-segels', Proceedings of the DGLR Walter Hohmann Symposium, Koeln, Germany, March 12-13, 1980, Paper DGLR 80-012.
-
117. (C-1979) van der Ha, J. C., 'Three-Dimensional Subsatellite Motion under Air Drag and Oblateness Perturbations', 30th IAF Conference, Munich, Germany, September 16-22, 1979, Paper IAF 79-188 (J-1982).
-
118. (C-1978a) V. J. Modi, and J. C. van der Ha, 'Long-Term Solar Radiation Induced Perturbations of the Proposed Solar Power Station', Proceedings of 8th U.S. National Congress of Applied Mechanics, Los Angeles, CA, June 1978, p. 58 (Missing).
119. (C-1978b) van der Ha, J. C., 'Exact Analytical Formulation of Planar Relative Motion', 29th IAF Conference, Dubrovnik, Yugoslavia, October 1-8, 1978, Paper IAF 78-86 (J-1980a).
-
120. (C-1977a) van der Ha, J. C., and V. J. Modi, 'Solar Pressure Induced Orbital Perturbations and Control of a Satellite in an Arbitrary Trajectory', 15th AIAA Aerospace Sciences Meeting, Los Angeles, CA, USA, January 24-26, 1977, Paper AIAA 77-32 (Only in Paper).
121. (C-1977b) van der Ha, J. C., and V. J. Modi, 'Heliocentric Solar Sail Trajectories', AAS Solar Sailing Small Symposium, Jet Propulsion Laboratory, Pasadena, CA, USA, April 20-21, 1977 (Only in Paper).

122. (C-1977c) van der Ha, J. C., and V. J. Modi, 'Solar Pressure Induced Orbital Perturbations and Control of a Geocentric Satellite Orbit', Proceedings of the 6th Canadian Congress of Applied Mechanics (CANCAM), Vancouver, BC, Canada, May 30-June 3, 1977, pp. 349-350 (Only in Paper).

123. (C-1977d) van der Ha, J. C., and V. J. Modi, 'On the Optimal Control Strategy for Orbital Transfer Using Solar Radiation Pressure', AAS /AIAA Astrodynamics Conference, Jackson, WY, USA, September 7-9, 1977, Paper AAS 77-321 (J-1979a).

124. (C-1976) van der Ha, J. C., and V. J. Modi, 'Long-Term Solar Radiation Effects upon an Orbit in the Ecliptic', 27th IAF Conference, Anaheim, CA, USA, October 10-16, 1976, Paper IAF 76-006 (J-1977a).

THESES

1. (T-1977) Doctoral Dissertation: 'Solar Radiation Induced Perturbations and Control of Satellite Trajectories', Dept. of Mechanical Engineering, University of British Columbia, Vancouver, Canada, June 1977 (PDF).

2. (T-1972) Master Thesis: 'Optimal Control Problems in Satellite Mechanics Solved by Analytical and Numerical Methods', Dept. of Mathematics, Technical University, Eindhoven, the Netherlands, December 1972 (Only in Paper).

3. (T-1971) Pre-Master Thesis: 'On the Optimal Design of a Column under Buckling and Vibration', Dept. of Mathematics, Technical University, Eindhoven, the Netherlands, November 1971 (Only in Paper).

ESA INTERNAL DOCUMENTS (Only in Paper)

1. van der Ha, J. C., 'An Outline on the Practical Use of Lie Series', ESA STR (Scientific & Technical Report) 215, April 1985 (PDF).

2. van der Ha, J. C., 'HIPPARCOS Performance Monitoring Software Requirements Definition', HIP-MSRD-001, ESA/ESOC, March 1986.

3. van der Ha, J. C., 'HIPPARCOS Mission Implementation Plan', Final Issue, HIP-MIP-003, ESA, June 1987.

4. van der Ha, J. C., 'HIPPARCOS Ground Segment System Test Plan', HIP-STP-001, ESA/ESOC, December 1988.
5. van der Ha, J. C., 'The HIPPARCOS Mission: In-Orbit Initialisation Phase', ESA SP (Special Publication) 1111, Vol. 1, June 1989, pp. 271-282.
6. van der Ha, J. C., 'The HIPPARCOS Mission: Role of the Ground Segment', ESA SP-1111, Vol. 1, June 1989, pp. 297-304.
7. van der Ha, J. C., 'The HIPPARCOS Mission: Interface with the Data Reduction Consortia', ESA SP-1111, Vol. 1, June 1989, pp. 305-315.
8. van der Ha, J. C., 'HIPPARCOS Ground Segment Design Summary Document', HIP-GSD-003, ESA/ESOC, July 1989
9. van der Ha, J. C., 'HIPPARCOS Recovery Mission Requirements Definition', HIP-REC-001, ESA/ESOC, September 1989.
10. van der Ha, J. C., 'HIPPARCOS Goldstone Support Requirements Definition', HIP-REC-002, ESA, September 1990.
11. van der Ha, J. C., 'HIPPARCOS Ground Segment Management Experience', HIP-REC-003, ESA/ESOC, November 1990.
12. van der Ha, J. C., 'Huygens Mission Assumptions Document', HUY-MAD-001, ESA/ESOC, November 1990.
13. van der Ha, J. C., 'Implementation and Operation of the HIPPARCOS Recovery Mission', ESA/SPC(91)31, June 1991.
14. van der Ha, J. C., 'Huygens Mission Implementation Requirements Document', HUY-MIRD-001, Issue 2, ESA/ESOC, October 1992.
15. van der Ha, J. C., 'INTEGRAL: Ground Segment & Operations Concept Document', INT-GSC-001, Issue 2, ESA/ESOC, December 1992.
16. van der Ha, J. C., 'INTEGRAL: Mission Assumptions Document', INT-MAD-001, Issue 2, ESA/ESOC, April 1993.
17. van der Ha, J. C., 'Huygens Mission Implementation Plan', HUY-MIP-001, Issue 2, ESA/ESOC, April 1993.
18. Heger, D., McDonald, M., van der Ha, J., et al., 'HIPPARCOS Operations Report', ESA/ESOC, May 1994.
19. van der Ha, 'Small Satellite Operations: Lessons to be Learned', Study Report, ESA Douglas Marsh Fellowship, JHU/Applied Physics Laboratory and NASA/GSFC, USA, September 1995 (PDF).

20. van der Ha, J. C., 'Quality & Product Assurance Concept for ESOC: Current PA Weaknesses', OPS-PAS-ST-002-MSOT, Issue 1, ESA/ESOC, January 31, 1996.
21. van der Ha, J. C., 'Quality & Product Assurance Concept for ESOC: Definitions & Background', OPS-PAS-ST-003-MSOT, Issue 1, ESA/ESOC, February 29, 1996.
22. van der Ha, J. C., 'ESOC Quality Assurance: Quality Assurance Manual', OPS-PAS-ST-004-MSOT, Draft 2, ESA/ESOC, March 15, 1996.
23. van der Ha, J. C., 'ESOC Quality Assurance: Implementation Concept', OPS-PAS-ST-001-MSOT, Issue 1, ESA/ESOC, March 15, 1996.
24. van der Ha, J. C., 'ESA Directorate of Operations: Quality Assurance Policy', OPS-PAS-ST-005-MSOT, Issue 1.1, ESA/ESOC, March 22, 1996.
25. van der Ha, J. C., 'Compilation of European National Mission Operational Facilities', Issue 1, ESA/ESOC, July 15, 1996.
26. van der Ha, J.C., 'TEAM-SAT: Ground Segment & Operations Issues', ESA /ESOC, January 30, 1997.
27. van der Ha, J.C., 'TEAM-SAT: ESOC Support Requirements and Implementation Concept', Issue 1.1, ESA /ESOC, March 21, 1997.
28. van der Ha, J.C., et al., 'ESOC Quality System Implementation and Certification to ISO 9001', ESA/ ESOC, August 14, 1997.

ESA INTERNAL PAPERS (Paper)

1. van der Ha, J. C., 'Exact Analytical Formulation of Planar Relative Motion', ESOC Internal Note No. 195, March 1978.
2. van der Ha, J. C., 'Generalised Averaging in Satellite Theory; Part 1: Theory', MAD (Mission Analysis Division) Working Paper No. 83, December 1978.
3. van der Ha, J. C., 'Generalised Averaging in Satellite Theory; Part 2: Applications', MAD Working Paper No. 84, January 1979.
4. van der Ha, J. C., 'Three-Dimensional Subsatellite Motion', MAD Working Paper No. 88, March 1979.
5. van der Ha, J. C., 'Solar Radiation Perturbations of Near-Circular Orbits', MAD Working Paper No. 98, May 1979.

6. van der Ha, J. C., 'Non-Conventional Perturbation Equations', MAD Working Paper No. 103, August 1979.
7. van der Ha, J. C., 'Relative Motion with and without a Connecting Tether', MAD Working Paper No. 104, August 1979.
8. van der Ha, J. C., 'Perturbation Equations for Near Geostationary Orbits', MAD Working Paper No. 116, December 1979.
9. van der Ha, J. C., 'Very Long-Term Orbit Evolution of a Geostationary Satellite', MAD Working Paper No. 122, March 1980.
10. van der Ha, J. C., 'Preliminary Thoughts on HIPPARCOS Flight Dynamics Support and Control', OAD (Orbit & Attitude Division) Working Paper No. 185, February 1981.
11. van der Ha, J. C., 'Design Considerations for a EURECA Retrievable Micro-Gravity Platform Mission', OAD Working Paper No. 199, October 1981 (PDF).
12. Physick, A., and J. C. van der Ha, 'METEOSAT-2 Transfer Orbit - Orbit and Attitude Manoeuvre Support', OAD Flight Dynamics Report, Vol. IV, No. 2, 16 February 1982.
13. van der Ha, J. C., 'Analysis of Secondary Dynamical Effects During Manoeuvres', OAD Working Paper No. 203, June 1982.
14. van der Ha, J. C., 'Evaluation of METEOSAT-2 Manoeuvre Performance', OAD Working Paper No. 204, June 1982.
15. van der Ha, J. C., 'Optimal Attitude Manoeuvre Strategy for SIRIO-2', OAD Working Paper No. 207, August 1982.
16. van der Ha, J. C., 'Evaluation of Torques due to Free Molecular Flow Interaction with Idealised Satellite Configurations', OAD Working Paper No. 213, November 1982.
17. van der Ha, J. C., 'Free-Molecular Flow Induced Attitude Variations of MARECS-A Satellite', OAD Working Paper No. 216, December 1982.
18. van der Ha, J. C., 'GIOTTO GTO Attitude Determination Accuracy', GIOTTO Study Note No. 40, February 1983.
19. van der Ha, J. C., 'Attitude Determination Covariance Analysis for Geostationary Transfer Orbits', OAD Working Paper No. 218, March 1983.
20. van der Ha, J. C., and P. de Broeck, 'Feasibility Study of HIPPARCOS Initial Star Pattern Recognition', OAD Working Paper No. 220, March 1983.

21. Physick, A., and J. C. van der Ha, 'MARECS-A Transfer Orbit - Orbit and Attitude Manoeuvre Support', OAD Flight Dynamics Report, Vol. IV, No. 2, 6 June 1983.
22. van der Ha, J. C., 'HIPPARCOS Despin Monitoring Capabilities', OAD Working Paper No. 226, August 1983.
23. Fraiture, L., J. C. van der Ha, and N. Wiengarn, 'ECS-2 and MARECS-B2 Dual Launch Feasibility', OAD Working Paper No. 227, August 1983.
24. van der Ha, J. C., 'Optimal Radial Thruster Alignment for MOP Satellites', OAD Working Paper No. 228, September 1983.
25. van der Ha, J. C., 'Thruster Performance Model Including Blow-Down Effects', OAD Working Paper No. 236, October 1983.
26. van der Ha, J. C., 'Optimisation of HIPPARCOS Gyro Configuration', OAD Working Paper No. 238, October 1983.
27. van der Ha, J. C., 'Perturbation Solution of Attitude Motion under Body-Fixed Torques', OAD Working Paper No. 242, January 1984.
28. van der Ha, J. C., and M. Soop, 'GEOS-2 De-Orbiting Preparation and Evaluation', OAD Working Paper No. 249, February 1984.
29. van der Ha, J. C., 'Non-Singular and Non-Conventional Orbit Perturbation Equations Derived from Rigid-Body Analogy', OAD Working Paper No. 257, March 1984.
30. R. Mugellesi, and J. C. van der Ha, 'EURECA Transfer Orbit Errors Induced by Attitude Depointing', OAD Working Paper No. 261, April 1984.
31. van der Ha, J. C., 'Operational Task Definition for HIPPARCOS Support', OAD Working Paper No. 263, April 84.
32. van der Ha, J. C., 'ECS-2 Launch Window Restrictions due to Attitude Determination Requirements', OAD Working Paper No. 269, June 1984.
33. van der Ha, J. C., and S. Liebig, 'ULYSSES Solar Radiation Model', OAD Working Paper No. 272, August 1984 (PDF).
34. Mugellesi, R., and J. C. van der Ha, 'Feasibility Assessment of RIT-10 Low-Thrust Control of EURECA's Orbit', OAD Working Paper No. 273, August 1984.
35. van der Ha, J. C., 'HIPPARCOS Functional Initialisation Phase Definition', OAD Working Paper No. 281, December 1984.
36. van der Ha, J. C., 'Operational Task Definition for HIPPARCOS Support - Final Issue', OAD Working Paper No. 263, February 1985.

37. van der Ha, J. C., 'Extraction of HIPPARCOS Program Star Samples from TYCHO Telemetry', OAD Working Paper No.290, March 1985.
38. van der Ha, J. C., 'HIPPARCOS Initialisation Phase Accuracy Assessment', OAD Working Paper No. 294, May 1985.
39. van der Ha, J. C., 'Synthesis of HIPPARCOS Initialisation Phase Design and Operational Requirements', OAD Working Paper No. 301, November 1985.
40. van der Ha, J. C., and R. Wills, 'Operational Support Requirements for HIPPARCOS Payload Calibrations', OAD Working Paper No. 303, October 1985.
41. van der Ha, J. C., 'Long-Term Evolution of a Near Geostationary Orbit with Application to GEOS-2', OAD Working Paper No. 306, November 1985.
42. van der Ha, J. C., 'HIPPARCOS Attitude Dynamics Aspects', OAD Working Paper No. 310, January 1986.
43. Martinez Benjamin, J. J., and J. C. van der Ha, 'A Perturbation Approach to Orbit Raising by Circumferential Thrust', MAO (Mission Analysis Office) Working Paper No. 233, February 1986.
44. van der Ha, J. C., 'HIPPARCOS Initial Calibration of SAS Pointing Biases and Gyro Drifts', OAD Working Paper No. 312, May 1986.
45. van der Ha, J. C., 'HIPPARCOS Fine Attitude Determination During the Initialisation Phase', OAD Working Paper No. 322, September 1986.
46. van der Ha, J. C., 'Attitude Dynamics Model of ARSAT Solar Sail Spacecraft', OAD Working Paper No. 328, January 1987.
47. van der Ha, J. C., 'A Global Analytical Description of the Sun-Earth Colinearity in GTO', OAD Working Paper No. 329, January 1987.
48. van der Ha, J. C., 'Long-Term Valid Asymptotic Solutions for Attitude Motion', OAD Working Paper No. 330, February 1987.
49. van der Ha, J. C., and R. Mugellesi, 'Analytical Approaches to Orbital Rendezvous Problems', OAD Working Paper No. 333, April 1987.
50. Mugellesi, R., and J. C. van der Ha, 'Results and Interpretation of Orbital Rendezvous Problems', OAD Working Paper No. 334, April 1987.
51. van der Ha, J. C., 'Investigation into Secular Effects on Abandoned Geostationary Satellites', MAS Working Paper No. 262, October 1987 (PDF).

ESA INTERNAL NOTES (Paper)

1. van der Ha, J. C., 'Model for Thrust and Fuel Use under Pressure Blowdown', JV-Note 83-1, November 1983.
2. van der Ha, J. C., 'Evaluation of HIPPARCOS Star Pattern Recognition Algorithms', JV-Note 85-1, February 1985.
3. van der Ha, J. C., 'HIPPARCOS Star Mapper Transit Time Analysis', JV-Note 86-1, March 1986.
4. van der Ha, J. C., 'Global Description of HIPPARCOS Attitude Reference Definition', JV-Note 86-2, September 1986.
5. van der Ha, J. C., 'HIPPARCOS Accurate Scan Rate Estimation by Kalman Filtering', JV-Note 86-3, December 1986.
6. van der Ha, J. C., 'HIPPARCOS On-Ground Datation Errors of Telemetry Data', JV-Note 87-1, November 1987.
7. van der Ha, J. C., 'Relative Motion under Small Radial Thrust: Exact and Approximate Analytical Solutions', JV-Note 87-2, November 1987.
8. van der Ha, J. C., 'Optimal Estimation of HIPPARCOS Thermal Drift Model from Downlinked Gyro Readings', JV-Note 87-3, December 1987.
9. van der Ha, J. C., 'Study of Orbit Injection Errors Induced by Attitude Errors at AMF', JV-Note 88-1, May 1988.
10. van der Ha, J. C., 'Fuel-Optimal Rendezvous Using Finite-Thrust Relative Trajectories', JV-Note 88-2, July 1988.
11. van der Ha, J. C., 'Analytical Solutions for Two- and Four-Impulse Optimal Rendezvous by Finite-Thrust', JV-Note 89-1, January 1989.
12. van der Ha, J. C., 'Summary of HIPPARCOS on-ground Telemetry Datation', JV-Note 89-2, February 1989.
13. van der Ha, J. C., 'Analytical Solutions for Fuel Optimal Rendezvous by Finite-Thrust Arcs', JV-Note 89-3, May 1989.
14. van der Ha, J. C., 'Evaluation of Huygens Experiment Proposals', JV-Note 90-1, March 1990.
15. van der Ha, J. C., 'Cassini-Huygens Probe Relay Link: Geometrical Characteristics', JV-Note 90-2, May 1990.

16. van der Ha, J. C., 'Cassini-Huygens Mission: Targeting & Delivery Accuracy Assessment', JV-Note 90-3, August 1990.
17. van der Ha, J. C., 'Huygens Delivery Requirements: Preliminary Values', JV-Note 90-4, October 1990.
18. van der Ha, J. C., 'Cassini-Huygens Mission: Huygens Operational Interface Issues', JV-Note 90-5, November 1990.
19. van der Ha, J. C., 'Cassini-Huygens Targeting & Delivery Accuracy Budgets', JV-Note 91-1, June 1991.

CONTOUR SYSTEM & ADCS REPORTS

for Johns Hopkins University / Applied Physics Laboratory, Laurel, MD

- A-1. van der Ha, J. C., 'CONTOUR Spinning Mode: **Phases & Activities**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA. May 24, 1999.
- A-2. van der Ha, J. C., 'CONTOUR Spinning Mode: **Maneuver Concept**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA. June 28, 1999.
- A-3. van der Ha, J. C., 'CONTOUR ADCS Subsystem: **Top-Level Requirements**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, September 30, 1999.
- A-4. van der Ha, J. C., 'CONTOUR Spinning Mode: **Attitude Determination Concept**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, December 17, 1999.
- A-5. van der Ha, J. C., 'CONTOUR Spinning Mode: **Analysis of Stability during SRM Burn**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, February 18, 2000.
- A-6. van der Ha, J. C., 'CONTOUR Spinning Mode: **Attitude Software Specifications**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, September 8, 2000.
- A-7. van der Ha, J. C., 'CONTOUR Spinning Mode: **Analysis of Inverted Earth Sensor Settings**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, December 5, 2000.
- A-8. van der Ha, J. C., 'CONTOUR Spinning Mode: **Definition of Earth Sensor Calibration Points**', Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, February 5, 2001.

- A-9. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Nutation Effects during Maneuvers**’, Kyushu University / Dept. of Aeronautics & Astronautics, Fukuoka, Japan, Issue 1.0, March 31, 2001 (Not Formally Issued)
- A-10. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Assessment of ESS Calibration Results**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, April 19, 2001.
- A-11. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Development of Initial Timeline**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Draft Issue, May 8, 2001.
- A-12. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Earth Radiance Analysis**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, May 16, 2001.
- A-13. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Earth Radiance Model**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, May 16, 2001.
- A-14. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Attitude Reorientation Maneuver Accuracy Analysis**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Draft Issue, June 29, 2001.
- A-15. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Implementation of Attitude Maneuvers**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, August 31, 2001.
- A-16. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Nutation Monitoring by Sun Aspect Angle Measurements**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, September 7, 2001.
- A-17. van der Ha, J. C., ‘CONTOUR Spinning Mode: **ESS Error Budgets**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, December 14, 2001.
- A-18. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Thrust Effects on a Tri-Axial Satellite**’, Kyushu University / Dept. of Aeronautics & Astronautics, Fukuoka, Japan, Draft 4, December 17, 2001 (Not Formally Issued).
- A-19. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Attitude Determination Test & Calibration Plans**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, March 13, 2002.

- A-20. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Earth Sun - Sensor Calibration Plan**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, Mar 15, 2002.
- A-21. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Implementation of Radial Delta-v Maneuvers**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, March 20, 2002.
- A-22. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Elimination of Biases in Attitude Determination**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Draft Issue, May 31, 2002.
- A-23. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Calibration Procedure for Determination of Thruster Performance Parameters**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, June 17, 2002.
- A-24. van der Ha, J. C., ‘CONTOUR Spinning Mode: **Error Analysis for Rhumb-Line Attitude Maneuvers**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, September 29, 2002 (Not Formally Issued).
- A-25. van der Ha, J.C., ‘CONTOUR Spinning Mode: **Analysis of Jet Damping Effects during SRM Burn**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, November 4, 2002.
- A-26. van der Ha, J.C., ‘CONTOUR Spinning Mode: **Results of Time-Varying Jet Damping Torque during SRM Burn**’, Johns Hopkins University / Applied Physics Laboratory, Laurel, MD, USA, Issue 1, November 18, 2002.

RESEARCH REPORTS

for University of Surrey, Guildford, UK

- S-1. van der Ha, J.C., ‘**Estimation Models for Agile Slews**’, Surrey Space Centre, Guildford, UK, Report V0, January 5, 2004.
- S-2. van der Ha, J.C., ‘**Agile Pitch Slew Estimation for NEO Application**’, Surrey Space Centre, Guildford, UK, Report V3, November 24, 2004.
- S-3. van der Ha, J.C., ‘**NEO2M Transition from Spin to 3-Axis Mode**’, Surrey Space Centre, Guildford, UK, Report V2, February 17, 2005.
- S-4. Lappas, V.J, B. Wie, and J. C. van der Ha, ‘**NEO2M CMG-Based ADCS Subsystem Design**’, Surrey Space Centre, Guildford, UK, Report WP2-TN2, April 20, 2005.

SPACECRAFT & MISSION DESIGN REPORTS

for Surrey Satellite Technology Ltd (SSTL), Guildford, UK

*In addition to the Surrey Space Centre Reports listed above, Jozef van der Ha was the system design engineer and principal author of 12 technical proposals (**commercial in confidence**) produced at Surrey Satellite Technology Limited (SSTL) of Guildford, UK, during the period from May 2004 to March 2006. The majority of these proposals deal with future Earth Observation missions, one deals with a telecommunication mission, and four others had scientific objectives.*

RESEARCH REPORTS

for ZARM, University of Bremen, D

- Z-1. van der Ha, J.C., '**Model of Gravity Force and Gravity Gradient Torque**', Report FLK-SIM-TN-ZAR-004, ZARM, University of Bremen, Bremen, Germany, April 13, 2006.
- Z-2. van der Ha, J.C., '**GAIA On-Ground Attitude Determination**', Report FLK-SIM-TN-ZAR-005, ZARM, University of Bremen, Bremen, Germany, September 21, 2006.