

7. References

- [1] S.von Hoerner, "The Design of Correcting Secondary Reflectors," IEEE Trans. Antennas Propagation vol. AP-24, pp. 336-340, May 1976.
- [2] P.R. Lawson and Y.L. Yen, "A Piecewise Deformable Subreflector for Compensation of Cassegrain Main Reflector Errors," IEEE Trans. Antennas Propag., vol. AP-36, pp.1342-1350, October 1988.
- [3] B.S. Westcott, F.A. Stevens and F. Brickell, "GO synthesis of offset dual reflectors," IEE Proc., vol. 128, Pt. H, no. 1, pp. 11-18, Feb.1981.
- [4] H.-T. Chou and P.H. Pathak, "Uniform asymptotic solution for electromagnetic reflection and diffraction of an arbitrary Gaussian beam by a smooth surface with an edge," Radio Science, vol. 32, no. 4 pp. 1319-1336, July-August 1997.
- [5] H-T. Chou, W.H. Theunissen and P.H. Pathak, "Novel Gaussian Beam Approach for Fast Synthesis of Large Reflector Antenna Configurations for Contoured Beam Applications," Accepted for presentation at PIERS Symposium, March 1999, Taiwan.
- [6] P.J.B. Clarricoats, A.D. Monk and H. Zhou, "Array-fed reconfigurable reflector for spacecraft systems," Electron. Lett., 30, (8), pp.613-614, 1994.
- [7] T.H. Lee and R.C. Rudduck, "OSU Reflector Antenna Code - Version 3.0 (NECREP Version 3.0) User's Manual," The Ohio State University ElectroScience Laboratory Technical Report 318021, February 1994.
- [8] C. Scott, "Modern Methods of Reflector Antenna Analysis and Design," Artech House, ISBN 0-89006-419-9, 1990.
- [9] R.G. Kouyoumjian and P.H. Pathak, "A Uniform Geometric Theory of Diffraction for the Edge of a Perfectly Conducting Surface," IEEE Proc., vol. 62, pp. 1448-1461, Nov. 1974.
- [10] B.S. Westcott, "Shaped Reflector Antenna Design." London Research Studies Press Ltd., 1983.
- [11] D. Duan and Y. Rahmat-Samii, "A Generalized Diffraction Synthesis Technique for High Performance Reflector Antennas," IEEE Trans. Antennas Propag., vol. AP-43, pp. 27-40, January 1995.
- [12] C.J. Sletten, "Reflector and Lens Antennas - Analysis and Design using Personal Computers," Artech House, ISBN 0-89006-240-4, 1988.

- [13] K.W. Brown and A. Prata, "A Design Procedure for Classical Dual Offset Reflector Antennas with Circular Apertures," *IEEE Trans. Antennas Propag.*, vol. AP-42, No. 8, August 1994.
- [14] A.W. Rudge, Milne, A.D. Olver and Knight, "The Handbook of Antenna Design Volume 1," Peter Peregrinus, ISBN 0-906048-82-6, 1982.
- [15] Y. Rahmat-Samii and V. Galindo-Israel, "Shaped Reflector Analysis using the Jacobi-Bessel Series," *IEEE Trans. Antennas Propag.*, vol. AP-28, No. 4, July 1980.
- [16] A. Papoulis, "A new algorithm in spectral analysis and band limited extrapolation," *IEEE Trans. On Circuits and Systems*, vol. CAS-22, no. 9, September 1975.
- [17] J. Michael Johnson and Y. Rahmat-Samii, "Genetic Algorithms in Engineering Electromagnetics," *IEEE AP Magazine*, Vol. 39, No.4, August 1997, pp. 7-21.
- [18] D.E. Goldberg, "Genetic Algorithms in Search, Optimization and Machine Learning," Addison-Wesley Publishing, ISBN 0-201-15767-5, 1989.
- [19] R.L. Haupt, "An Introduction to Genetic Algorithms for Electromagnetics," *IEEE AP Magazine*, Vol. 37, No. 2, April 1995, pp. 7-15.
- [20] A.R. Cherrette, S.W. Lee and R.J. Acosta, "A Method for Producing a Shaped Contour Radiation Pattern Using a Single Reflector and a Single Feed," *IEEE Trans. Antenn. Propagat.*, vol.37, no.6, pp. 698-702, June 1989.
- [21] H.-S. Yoon and G. Washington, "Piezoceramic actuated aperture antennas," *Smart Mater. Struct.* vol.7(1998), pp. 537-542.
- [22] H.-H. Viskum, S.B. Sørensen and K. Pontoppidan, "A dual reflector system with a reconformable subreflector," *IEEE AP-S Symposium and USNC/URSI Nat. Radio Science Meeting*, Atlanta, 1998.
- [23] W.H.Theunissen, Hwansik T. Yoon, G. Washington and W.D. Burnside, "Reconfigurable Contour Beam Reflector Antennas using Adjustable Subreflector and an Adjustable Single Feed," Accepted for publication *IEEE Microwave and Optical Technology Letters*, July 1999.
- [24] E.O. Brigham, "The fast Fourier transform and its applications," Prentice-Hall International, 1985.
- [25] V. Krichevsky and D.F. DiFonzo, "Optimum Beam Scanning in Offset Single and Dual Reflector Antennas," *IEEE Trans. Antennas Propag.*, vol. AP-33, No. 2, February 1985.

- [26] S.W. Lee, "Differential Geometry for GTD Applications," Electromagnetics Laboratory Report No. 77-21, University of Illinois at Urbana-Champaign.
- [27] W.H. Theunissen, "Qualification of an X-band Spaceborne Patch Array Antenna," 1991 SAIEEE Symposium, July 1992, Johannesburg South Africa.
- [28] G. Washington, "Smart aperture antennas," Smart Mater. Struct. vol. 5(1996), pp. 801-805.
- [29] H-S.Yoon, G. Washington and W.H. Theunissen, "Analysis of Doubly Curved Antenna Structures," Submitted to IEEE Trans. Antennas and Propagat.
- [30] W.H.Theunissen, Hwansik T. Yoon, G. Washington and W.D. Burnside, "Mechanical finite element diffraction synthesis of reconfigurable contour beams from dual offset reflector antennas," Submitted to IEEE Trans. Antennas and Propagat.
- [31] W.H.Theunissen, Hwansik T. Yoon, G. Washington and W.D. Burnside, "Mechanical finite element diffraction synthesis of reconfigurable contour beams from dual offset reflector antennas," Accepted for presentation at IEEE AP-S International Symposium and USNC/URSI National Radio Science Meeting, Orlando Florida, July 1999.
- [32] W.H. Theunissen, J.W. Odendaal and J. Joubert, "Using Measured Feed Data in Dual Reflector System Software Models to Predict Antenna Parameters," Presented at the 10th IEE Conference, Edinburgh, Scotland, April 1997.