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**Janet L. Beery\*** ([janet\\_beery@redlands.edu](mailto:janet_beery@redlands.edu)), Dept. of Mathematics, Univ. of Redlands, Redlands, CA 92373. *Navigating Between Triangular Numbers and Trigonometric Tables: How Thomas Harriot Developed His Interpolation Formulas.*

By 1611, Thomas Harriot (1560-1621) was developing finite difference interpolation methods, work that culminated in 1618 or later in his unpublished treatise, “De numeris triangularibus et inde de progressionibus arithmeti- cis: Magisteria magna”, in which he derived symbolic interpolation formulas and showed how to use them to interpolate in tables. This treatise and its influence have been the subject of recent research by the author and Jacqueline Stedall. The interpolation formulas that appear in Harriot’s manuscripts vary in notation, structure, and method of application. In the present paper, we use these largely undated manuscripts to show how Harriot may have developed and refined his methods over time. (Received September 10, 2007)