1067-05-356   **Joseph E. Bonin*** (`jbonin@gwu.edu`), Department of Mathematics, The George Washington University, Washington, DC 20052, **Joseph P.S. Kung**, Department of Mathematics, University of North Texas, Denton, TX 76203, and **Anna de Mier**, Departament de Matematica Aplicada II, Universitat Politecnica de Catalunya, Barcelona, Spain. *Characterizations of fundamental transversal matroids.*

A result of Mason, with a simplification observed by Ingleton, characterizes transversal matroids as the matroids that satisfy a particular inequality that relates the ranks of intersections and unions of nonempty sets of cyclic flats. We show that fundamental transversal matroids are precisely the matroids that yield equality in Mason's inequality. We also deduce a characterization of fundamental transversal matroids due to Brylawski from our simpler result. (Received August 26, 2010)