1046-34-1253 Paul W Eloe* (Paul.Eloe@notes.udayton.edu), Department of Mathematics, University of Dayton, Dayton, OH 45469-2316, and Johnny Henderson. Uniqueness Implies Existence and Uniqueness Conditions for a Class of (k + j)-Point Boundary Value Problems for nth Order Differential Equations.

For the *n*th order nonlinear differential equation, $y^{(n)} = f(x, y, y', \dots, y^{(n-1)})$, we consider uniqueness implies existence results for solutions satisfying certain (k + j)-point boundary conditions, $1 \le j \le n - 1$, and $1 \le k \le n - j$. We define (k; j)-point unique solvability in analogy to k-point disconjugacy and we show that $(n - j_0; j_0)$ -point unique solvability implies (k; j)-point unique solvability for $1 \le j \le j_0$, and $1 \le k \le n - j$. This result is in analogy to n-point disconjugacy implies k-point disconjugacy, $2 \le k \le n - 1$. (Received September 15, 2008)