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ON GENERALIZED INVERSES OF BANDED MATRICES*

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Abstract. Bounds for the ranks of upper-right submatrices of a generalized inverse of a strictly lower k-banded matrix are obtained. It is shown that such ranks can be exactly predicted under some conditions. The proof uses the Nullity Theorem and bordering technique for generalized inverse.

Key words. Generalized inverse, Banded matrix, Rank.

AMS subject classifications. 15A09.

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