1011-47-88 Kenneth R. Davidson* (krdavids@uwaterloo.ca), Pure Math. Dept., University of Waterloo, Waterloo, ON N2L 3G1, Canada, and Rupert H. Levene (rlevene@uwaterloo.ca), Pure Math. Dept., University of Waterloo, Waterloo, ON N2L 3G1, Canada. 1-Hyperreflexivity and Complete Hyperreflexivity. Preliminary report.

A subspace \mathcal{S} of the space $\mathcal{B}(\mathcal{H})$ of bounded operators on Hilbert space is called *1-hyperreflexive* if

$$\operatorname{dist}(T, \mathcal{S}) = \sup_{\|x\|=1} \operatorname{dist}(Tx, \mathcal{S}x)$$

for every operator $T \in \mathcal{B}(\mathcal{H})$. The 1-hyperreflexive subspaces and subalgebras of $\mathcal{B}(\mathcal{H})$ are completely classified.

It is also shown that there are 1-hyperreflexive subspaces for which the complete hyperreflexivity constant is strictly greater than 1. The constants for $\mathbb{C}T \otimes \mathcal{B}(\mathcal{H})$ are analyzed in detail. (Received August 16, 2005)