We study the range

\[ S(A) := \{ x^T Ay : x, y \text{ are orthonormal in } \mathbb{R}^n \}, \]

where \( A \) is an \( n \times n \) complex skew symmetric matrix. It is a compact convex set. Power inequality \( s(A^{2k+1}) \leq s^{2k+1}(A) \), \( k \in \mathbb{N} \), for the radius \( s(A) := \max_{\xi \in S(A)} |\xi| \) is proved. When \( n = 3, 4, 5, 6 \), relations between \( S(A) \) and the classical numerical range and the \( k \)-numerical range are given. (Received September 22, 2010)