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George R. Exner* (exner@bucknell.edu). *A mixed hyponormality-contractivity condition.* Preliminary report.

For T a linear operator on Hilbert space of norm one, and n a positive integer, define the condition $C(n)$ on T by $\sum_{i=0}^n (-1)^i \binom{n}{i} T^{*i} (T^*T - TT^*) T^i \geq 0$. (This mixes the familiar positivity condition for hyponormality with the Agler positivity condition for n -contractivity.) For T to have $C(n)$ for all n it is not sufficient that T be subnormal; for weighted shifts W , we exhibit a sufficient condition, related to infinite divisibility of W , for W to have $C(n)$ for all n , give some further results, and discuss some examples. (Received August 31, 2017)