Signed Magic arrays with certain property

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A signed magic array, $SMA(m,n;s,t)$, is an $m \times n$ array with the same number of filled cells s in each row and the same number of filled cells t in each column, filled with a certain set of numbers that is symmetric about the number zero, such that every row and column has a zero sum. We use the notation $SMA(m,n)$ if $m = t$ and $n = s$. In this presentation we show that for every even number $n \geq 2$ there exists an $SMA(m,n)$ such that the entries $\pm x$ appear in the same row for every $x \in \{1,2,3,\ldots,mn/2\}$ if and only if $m \equiv 0,3(\mod 4)$ and $n = 2$ or $m \geq 3$ and $n \geq 4$.

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