1163-03-1088 **Peter Cholak*** (cholak@nd.edu), cholak@nd.edu, and **Peter Gerdes** (gerdes@invariant.org), gerdes@invariant.org. *The Collapse of an REA hierarchy.* Preliminary report.

Consider the following statement $S(m,n)$: If C is any set which is $(m+1)$-REA and not of m-REA degree, there exists a set A which is n-r.e. in C such that $A \oplus C$ is not of $(m+n)$-REA degree. Soare and Stob [1982] showed this statement holds for $m = 0$ and $n = 1$. Cholak and Hinman [1994] showed that this statement hold for $m = 0, 1$ and arbitrary $n \geq 0$. They also conjectured it holds for all n and m. However, we will show that this statement fails for $n = 2$ and $m = 1$. (Received September 14, 2020)