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Phillip S Harrington* (pharring@usd.edu), Department of Mathematical Sciences, University of South Dakota, 414 East Clark Street, Vermillion, SD 57069. *Pseudoconvex Exhaustions and Stein Neighborhood Bases.*

One significant obstacle in several complex variables is the fact that even though every pseudoconvex domain can be exhausted from within by strictly pseudoconvex domains, not all such pseudoconvex domains possess a Stein neighborhood basis. We will discuss special cases where the exhaustion can be extended outside the domain as a Stein neighborhood basis, with applications to the $\bar{\partial}$ and $\bar{\partial}_b$ operators on C^1 pseudoconvex domains. (Received September 01, 2006)