1077-30-1942J. Marshall Ash* (mash@math.depaul.edu), DePaul University, Mathematics Department,
Chicago, IL 60614. An analytic function without radial boundary values.

It is a fairly well known, but not immediately accessible, fact that there exists a function analytic on $D = \{z \in \mathbb{C} : |z| < 1\}$ that has a radial limit at no point of the boundary $\{z \in \mathbb{C} : |z| = 1\}$. The function $f(z) = \sum_{n=0}^{\infty} z^{n!}$ can easily be shown to be be an example of such a function. The very short proof of this is buried in the paper of J. M. Ash and M. T. Karaev, "On the boundary behavior of special classes of C-functions and analytic functions," which will appear in the International Mathematical Forum. Since I think this is a useful fact, I will sketch the proof that the analytic on D function f(z) is radially divergent on the entire boundary of D. (Received September 21, 2011)