1044-54-165 **Jerry E Vaughan***, University of North Carolina at Greensboro, Department of Mathematics and Statistics, P. O. Box 26170, Greensboro, NC 27402, and **Alan Dow** (adow@uncc.edu), University of North Carolina at Charlotte, Department of Mathematics and Statistics, 9201 University City Blvd., Charlotte, NC 28223. *Conditions equivalent to having a one-point Stone-Čech remainder for Mrówka ψ-spaces.*

Let κ denote an infinite cardinal, and $\mathcal{A} \subset [\kappa]^\omega$ a maximal almost disjoint family of countably infinite subsets of κ. Let $\psi(\kappa, \mathcal{A})$ denote the space whose underlying set is $\kappa \cup \mathcal{A}$ and that has the topology which has as a base all singletons $\{\alpha\}$ for $\alpha < \kappa$ and all sets of the form $\{A\} \cup (A \setminus F)$ where F is finite. For the case $\kappa = \omega$, $\psi(\omega, \mathcal{A})$ is the well known space of S. Mrówka which he denoted $N \cup \mathcal{R}$. Mrówka constructed $\mathcal{A} \subset [\omega]^\omega$ such that $|\beta\psi(\omega, \mathcal{A}) \setminus \psi(\omega, \mathcal{A})| = 1$. In other words, the Stone-Čech compactification of $\psi(\omega, \mathcal{A})$ equals its one-point compactification. We add some conditions to several used by Mrówka, that are equivalent to $|\beta\psi \setminus \psi| = 1$, and we show that these conditions remain equivalent for ψ-spaces defined on uncountable cardinals $\kappa \leq \mathfrak{c}$. These conditions are not all equivalent for cardinals $\kappa > \mathfrak{c}$, but they help motivate our approach to the study of ψ-spaces for cardinals $\kappa > \mathfrak{c}$. (Received August 31, 2008)