A PWA of $p\omega$ in photoproduction using CLAS MIKE WILLIAMS, Carnegie Mellon University, CLAS COLLABORATION — We will present results of a partial wave analysis (PWA), on the reaction $\gamma p \rightarrow p\omega$ with the $\omega$ decaying to $\pi^+\pi^-\pi^0$. The decay of the $\omega$ into its three pseudoscalar final state provides information on the polarization of the $\omega$ which in turn provides an additional handle in the PWA analysis. These data are analyzed using a covariant tensor formalism which provides a natural mechanism for including both $t$-channel contributions as well as background terms in the PWA. The results of such an analysis are a decomposition of into the $s$-wave contributions to the final state. The mass dependence of the intensity and phase of these partial waves can be used to deduce information about the baryon resonances that couple to $p\omega$ final states.