## IAA-00-IAA.9.1.04

## ONE HUNDRED UP, 4900 TO GO! A PROJECT ARGUS UPDATE

Paul Shuch The SETI League, Inc. Little Ferry, New Jersey, USA

The SETI League, Inc. launched its *Project Argus* all-sky survey in April 1996, with the ambitious goal of real-time all-sky coverage. This SETI experiment is unique in that it employs the talents and energies of thousands of dedicated amateur radio astronomers worldwide. In its first four years, *Project Argus* has grown from five small prototype radio telescopes to one hundred operational stations, with hundreds more under construction. We are still decades away from our projected 5,000 stations able to see in all directions at once. Nevertheless, much has been learned about how to build radio telescopes on the cheap, operate them with the utmost of professionalism, and interpret received data with scientific rigor.

This paper reviews the design criteria of the basic *Project Argus* station, and shows how it achieves sensitivity on a par with the very best professional facilities of a quarter century ago. The challenges of signal verification and global participation are discussed. Several interesting candidate signals are shown (none of which passed our rigorous tests for intelligent extra-terrestrial origin). An extrapolation of current *Project Argus* technology into the next few decades demonstrates the evolutionary nature of amateur radio telescopes, and their power in a coordinated global search.