

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space Culture – Public Engagement in Space through Culture (9)

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THE ASTRONAUT ETHNOGRAPHY WEB PROJECT: INSIGHTS FROM FIRST-PERSON  
ACCOUNTS OF SPACE

**Abstract**

The Astronaut Ethnography Web Project is an online educational resource that aims to democratize insights from spacefaring humans about life in space. Informed by both archival research and astronaut interviews, the goal of this web project (to be publicly released in 2022) is to present a curated collection of human perspectives on life in space from a diverse group of astronauts, cosmonauts, and spaceflight participants. This project was motivated by a series of astronaut interviews conducted by the authors for an ongoing space ethnography research stream, whose findings were presented in “Astronaut Ethnography: A Design Research Approach to Microgravity” (IAC 2020). Data for this website include first-person published accounts, debriefs, and journals of space written by astronauts and cosmonauts during and after their missions to space. Using grounded theory method (GTM) and qualitative research methods, astronaut insights are coded and tagged with metadata, so that they can be grouped, sorted, and filtered within a searchable database. The website is organized with the following sections: 1) “Narratives” showcases analyses of themes curated by the authors based on astronaut data, 2) “Insights” presents a searchable database of de-identified astronaut anecdotes, 3) “Principles” highlights a set of human-centered design principles for space environments first presented in “Astronaut-in-the-Loop: An Iterative Design Research Framework for Space Environments” (ICES 2021), and 4) “Sources” includes sources for the primary source accounts and the qualitative research methodologies that inform the analysis presented in the website. The Astronaut Ethnography Web Project is intended to educate a broad audience of people interested in designing and building for space, including students, researchers, government, and industry professionals. The project’s focus on human-centered insights reflects its commitment to design-education pedagogies, emphasizing the value of human contributions to how we design, build, and test future technologies and environments for space. As space increasingly opens to include a more diverse group of individuals and institutions, this resource will serve as a unique platform, contributing experiential knowledge to a wealth of existing foundational research on human health, psychology, and technical innovation.

In this paper, we will describe the motivations, sources, design process, and final outcomes associated with the Astronaut Ethnography Web Project. We will also evaluate the final website outcome, reviewing it with relevant experts in space education, design, and engineering. We will then describe takeaways and lessons learned from the design and evaluation process, and how they inform the final iteration of the website.