

HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Human Spaceflight Global Technical Session (9-GTS.2)

Author: Ms. Sara Langston
Senmurv Consulting LLC, United States, slangston@senmurvconsulting.com

Dr. Sarah Jane Pell
ESA Topical Team Arts & Science, Australia, research@sarahjanepell.com

“ASTRONAUT 2.0”: CONNECTING THE PHYSICAL AND SOCIAL PERCEPTIONS ON HUMAN
IDENTITY, FORM AND FUNCTION IN SPACE TO DEFINE THE PARAMETERS OF SPACE
FARING INDIVIDUALS

Abstract

This paper and presentation follows up on discussions started by the authors in their IAC 2014 paper: “What is in a name? Perceived identity, classification, philosophy, and implied duty of the ‘astronaut’.” Building on this foundation we continue the conversation beyond the origins and implications of defining an ‘astronaut’ and further lead the discussion on questions, perspectives and even controversies encompassing the prospective space roles for the new commercial space age. The significance of this discussion, as demonstrated in our previous research, is that public and political conceptions and perceptions of what identifies a person as an ‘astronaut’ both informs and impacts human communications, societal expectations and actions in regard to that identity. In addition to a paper, this presentation will engage a multimodal and multidimensional format to synthesize and illustrate the intrinsically interconnected web of issues and topics at play here.

Specifically, through an original and creative presentation we will connect the dots and highlight the intricate ecosystem of relevant physical, social and political questions and factors with regard to an ‘astronaut’s’ identity and provide a comprehensive framework of the actors, approaches, linguistics and implications involved. These issues may include: 1) Distinguishing nongovernmental from governmental astronauts, commercial crew from spaceflight participants, and permanent versus transitory actors in space. 2) Distinguishing human astronauts from nonhumans - such as robotic envoys, artificial intelligence, other animals, and potential “Chewbacca’s” (non-terrestrial space farers); distinguishing the human astronaut from technological artifacts (spacesuit/spacecraft). 3) Evaluating notions of ‘transhumanism’ for spaceflight: adapting and/or enhancing humans for space - the range of medical implications here can range from minimal physiological intervention to science fiction. 4) Identifying the moral values and policy frameworks triggered by these actual/prospective human space activities. The ultimate objective of this paper and presentation is to create an open space for dialogue and to foster an informed and multidisciplinary conversation on humanity’s identity, form and function in space, today and in the future.