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"Of Astronauts and Algae: NASA and the Dream of Multispecies Spaceflight"

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This article uses the history of an unrealized technology to rethink conventional accounts of American spaceflight that cast the space cabin as the ultimate expression of humans' capacity to technologically master their environments. Drawing on archival and published sources, I detail the history of the bioregenerative life-support system, a system in which simple organisms—most commonly algae—would inhabit the spacecraft and, through a series of interspecies symbioses, maintain cabin conditions and sustain astronaut life. By homing in on the maintenance practices of the system and taking seriously the kinds of interspecies possibilities they would have engendered, this account does the work of recovering how the history of American spaceflight as we know it today was not at all inevitable, and in fact it could well have been a thoroughly multispecies affair. At the same time, by offering an exaggerated example of the ways astronauts during space travel were (and are) in reality wholly reliant upon a host of technical systems for survival, the bioregenerative system points to the ways that this history not only *could* have been otherwise but was otherwise: the human in outer space is always already a problem of safely delivering a threatened body through an altogether inimical environment and back again. The maintenance practices of spacecraft life-support systems, real or imagined, thus afford occasion to recover a new layer of historical relations that, in turn, provide a frame through which to resignify the meaning of the space cabin in the history of American spaceflight: from an emblem of technoscientific supremacy to a place of interdependency. (Text from author's abstract)

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