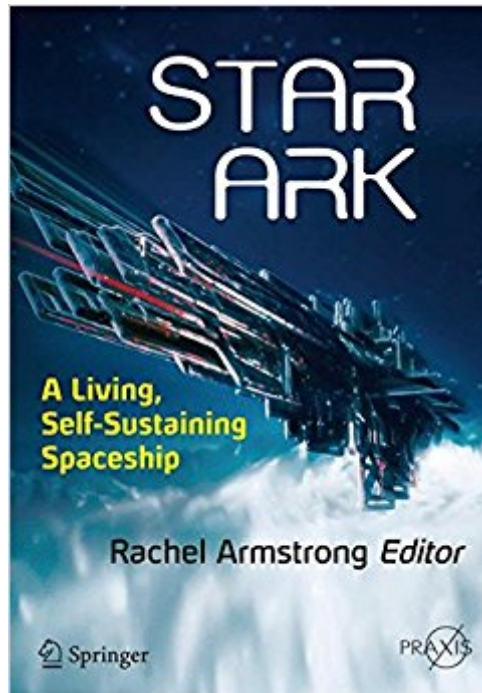


The book was found

Star Ark: A Living, Self-Sustaining Spaceship (Springer Praxis Books)



Synopsis

As space ventures have become more numerous, leading scientists and theorists have offered ways of building a living habitat in a hostile environment, taking an ecosystems view of space colonization. The contributors to this volume take a radical multi-disciplinary view of the challenge of human space colonization through the ongoing project Persephone. This book fundamentally challenges prevalent ideas about sustainability and proposes a new approach to resource austerity and conservation and providing truly sustainable approaches that are life-promoting. Readers will learn the details of the plans for Persephone – a real project that is part of the company Icarus Interstellar's plans for the design and engineering of a living interior on a worldship to be constructed in Earth's orbit within 100 years. Although the timeframe itself is only an estimate, since it is contingent on many significant developments, including funding and technological advances, the industry consensus is that within 100 years we will see manned space exploration beyond our solar system. This notion is shared by organizations such as the Initiative for Interstellar Studies and the DARPA-funded 100-year starship project. This book specifically develops the principles for the construction of a living habitat within a worldship – a multi-generational starship that contains its own world that supports colonists as it travels across great distances between stars at a speed much slower than light. Far from being a sterile industrial setup, such as the ISS, or even being a bucolic suburbia as proposed by Gerard O'Neill in the 1970s, this worldship will provide the pre-conditions for sustaining life beyond Earth's environment, which may also lead to the evolution of non-terrestrial ecologies. Drawing on the principles of ecopoiesis and insights offered by the Biosphere 2 experiment that demonstrated what we have to learn about ecosystem construction, this book proposes first designing the soils of such a space. It should then be possible to set up the conditions that a first generation of colonists may experience in leaving our solar system to find new worlds to settle - perhaps in spreading life throughout the universe. Although the book takes a unique view of ecology and sustainability within the setting of a traveling starship it is equally concerned with the human experience on artificial worlds. Chapters come from a range of multi disciplinary thinkers who shed light on the brave new future ahead from different angles.

Book Information

Series: Springer Praxis Books

Paperback: 492 pages

Publisher: Springer; 1st ed. 2017 edition (November 15, 2016)

Language: English

ISBN-10: 3319310402

ISBN-13: 978-3319310404

Product Dimensions: 6.6 x 0.9 x 9.4 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #338,613 in Books (See Top 100 in Books) #57 in [Books > Engineering & Transportation > Engineering > Aerospace > Aircraft Design & Construction](#) #191 in [Books > Engineering & Transportation > Engineering > Aerospace > Astronautics & Space Flight](#) #192 in [Books > Textbooks > Engineering > Aeronautical Engineering](#)

Customer Reviews

“This peculiar and interesting book is suitable if you are curious about the matter of long space travels, like e.g. hundreds of years, and the problem of the colonization of new worlds. The solution presented here is a serious study on the so-called *generation ships*, which are well-known among science-fiction readers. An intriguing book about an unusual subject.” (Gabriella Bernardi, Astrocom et al., astrocometal.blogspot.de, January, 2017)

As space ventures have become more numerous, leading scientists and theorists have offered ways of building a living habitat in a hostile environment, taking an *ecosystems* view of space colonization. The contributors to this volume take a radical multi-disciplinary view of the challenge of human space colonization through the ongoing project Persephone. This book fundamentally challenges prevalent ideas about sustainability and proposes a new approach to resource austerity and conservation and providing truly sustainable approaches that are life-promoting. Readers will learn the details of the plans for Persephone – a real project that is part of the company Icarus Interstellar’s plans for the design and engineering of a living interior on a worldship to be constructed in Earth’s orbit within 100 years. Although the timeframe itself is only an estimate, since it is contingent on many significant developments, including funding and technological advances, the industry consensus is that within 100 years we will see manned space exploration beyond our solar system. This notion is shared by organizations such as the Initiative for

Interstellar Studies and the DARPA-funded 100-year starship project. This book specifically develops the principles for the construction of a living habitat within a worldship – a multi-generational starship that contains its own world that supports colonists as it travels across great distances between stars at a speed much slower than light. Far from being a sterile industrial setup, such as the ISS, or even being a bucolic suburbia as proposed by Gerard O'Neill in the 1970s, this worldship will provide the pre-conditions for sustaining life beyond Earth's environment, which may also lead to the evolution of non-terrestrial ecologies. Drawing on the principles of ecopoiesis and insights offered by the Biosphere 2 experiment that demonstrated what we have to learn about ecosystem construction, this book proposes first designing the soils of such a space. It should then be possible to set up the conditions that a first generation of colonists may experience in leaving our solar system to find new worlds to settle - perhaps in spreading life throughout the universe. Although the book takes a unique view of ecology and sustainability within the setting of a traveling starship it is equally concerned with the human experience on artificial worlds. Chapters come from a range of multi disciplinary thinkers who shed light on the brave new future ahead from different angles.

I learned a lot. Well written and thorough.

[Download to continue reading...](#)

Star Ark: A Living, Self-Sustaining Spaceship (Springer Praxis Books) Praxis II Elementary Education: Multiple Subjects (5001) Exam Secrets Study Guide: Praxis II Test Review for the Praxis II: Subject Assessments Praxis II Middle School English Language Arts (5047) Exam Secrets Study Guide: Praxis II Test Review for the Praxis II: Subject Assessments Self Help: How To Live In The Present Moment (Self help, Self help books, Self help books for women, Anxiety self help, Self help relationships, Present Moment, Be Happy Book 1) Praxis Core Academic Skills for Educators (5712, 5722, 5732) Study Guide: Test Prep and Practice Test Questions for the Praxis Core Reading, Math and Writing Exams Praxis II Social Studies (5081) Study Guide: Test Prep and Practice Questions for the Praxis II (5081) Content Knowledge Exam Praxis II English Language Arts Content Knowledge (5038): Study Guide and Practice Test Questions for the Praxis English Language Arts (ELA) Exam Praxis Principles of Learning and Teaching K-6 Study Guide: Test Prep and Practice Test Questions for the Praxis II PLT 5622 Exam Praxis Principles of Learning and Teaching 7-12 Study Guide: Test Prep and Practice Test Questions for the Praxis II PLT 5624 Exam Praxis Core Academic Skills for Educators Tests: Book + Online (PRAXIS Teacher Certification Test Prep)

Praxis II Social Studies Content Knowledge 5081 Study Guide: Test Prep & Practice Test Questions for the Praxis 2 Social Studies Exam Praxis II Elementary Education Multiple Subjects 5001 Study Guide: Test Prep & Practice Test Questions for the Praxis 2 Elementary Education Multiple Subjects 5001 Exam Praxis II Mathematics Content Knowledge 5161 Study Guide: Test Prep & Practice Test Questions for the Praxis 2 Math Exam Praxis French Sample Test 0173 Teacher Certification Test Prep Study Guide (XAM PRAXIS) PRAXIS II Middle School Mathematics (5169) Book + Online (PRAXIS Teacher Certification Test Prep) Praxis II Elementary Education Multiple Subjects 5001 Flash Cards: Over 800 Praxis Elementary Education Flash Cards for Test Prep Review Praxis Core Academic Skills for Educators (5712, 5722, 5732) Flash Cards: Praxis Core Exam Prep with 300+ Flash Cards Stars Above, Earth Below: A Guide to Astronomy in the National Parks (Springer Praxis Books / Popular Astronomy) Assembling and Supplying the ISS: The Space Shuttle Fulfills Its Mission (Springer Praxis Books) The Apollo Guidance Computer: Architecture and Operation (Springer Praxis Books)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)