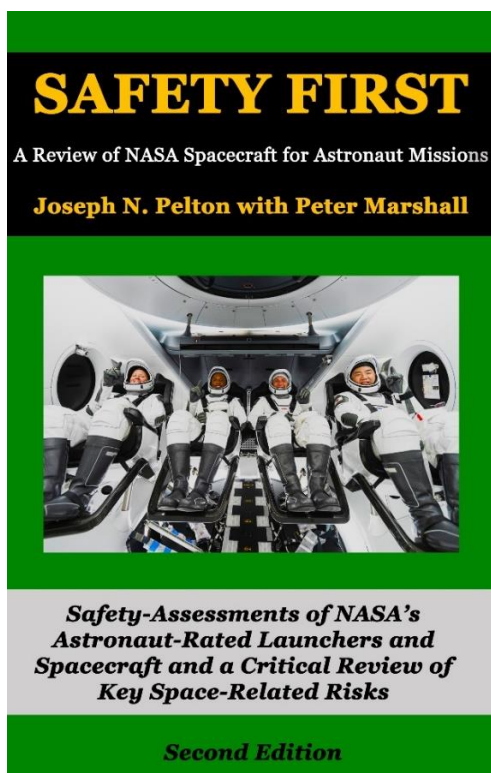


**Four Books Authored by Joseph Pelton and Peter Marshall in the Last 3 Years
under Grants from the Space Shuttle Childrens' Trust Fund**

Here are the latest books prepared for the Trust Fund that were undertaken to review NASA astronaut exploration programs and the safety of its launchers and crew capsules. The Safety First book has just been reissued as a 2nd edition with latest updates. The Gateway Lunar Space Station, Twentieth Century Space Stations, and Safety on the Moon series are also available on line at Amazon.com.



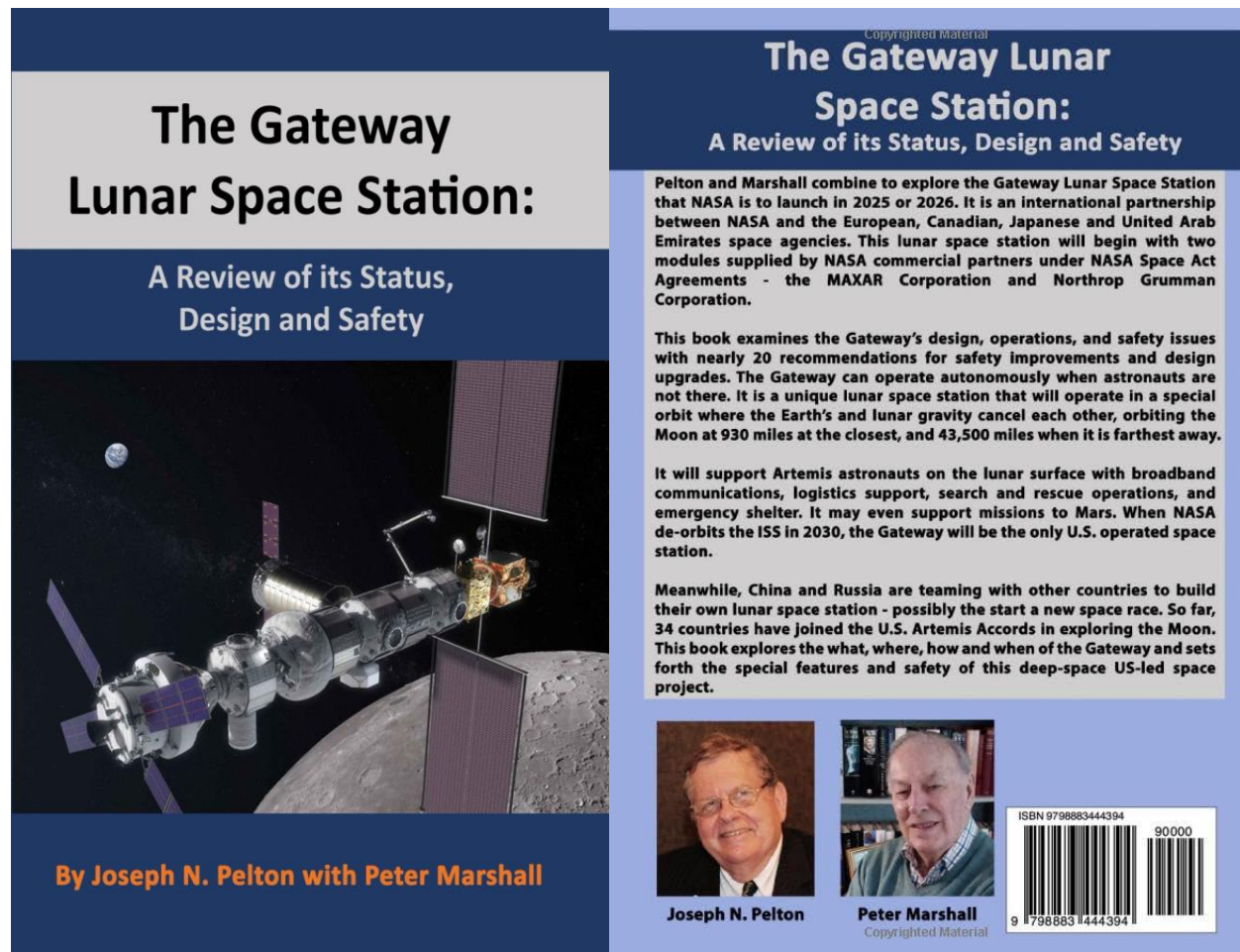
The newly issued second edition reviews the safety issues and status of the Space Launch System vehicle, the Orion Crew Exploration Vehicle, the SpaceX Cargo and Crew Dragon Capsule, the Sierra Nevada Dreamchaser, the Boeing Starliner, the various SpaceX launcher systems—including the Starship - and the transition from the Atlas-Centaur to the new Vulcan launcher. The development of current launch systems for the US has been significantly impacted by innovations that have come from so-called “NewSpace” companies and thus there are number of profiles provided for companies such as SpaceX, Sierra Nevada, Axiom Space and others. This new book is available on line from Amazon for \$16.95 or as a Kindle e-book for \$9.95.

<https://www.amazon.de/Safety-First-2nd-Spacecraft-Astronaut-ebook/dp/B0D8G7QYDB>

Joseph N. Pelton with Peter Marshall "The Gateway Lunar Space Station: New Approaches to Space Safety" (2024) \$17.95

This book explores the Gateway Lunar Space Station that is to be deployed in a special orbit so it can see the lunar surface from the North to the South Poles. This international space station will be NASA's only facility in space after 2030 when the ISS is deorbited and NASA will be depending on commercially operated space stations in low Earth orbit for research activities. \$14.95

<https://www.amazon.com/21st-Century-Space-Station-Approaches/dp/B0B2TF62PN>



The Gateway Lunar Space Station:
A Review of its Status, Design and Safety

By Joseph N. Pelton with Peter Marshall

The Gateway Lunar Space Station:
A Review of its Status, Design and Safety

Pelton and Marshall combine to explore the Gateway Lunar Space Station that NASA is to launch in 2025 or 2026. It is an international partnership between NASA and the European, Canadian, Japanese and United Arab Emirates space agencies. This lunar space station will begin with two modules supplied by NASA commercial partners under NASA Space Act Agreements - the MAXAR Corporation and Northrop Grumman Corporation.

This book examines the Gateway's design, operations, and safety issues with nearly 20 recommendations for safety improvements and design upgrades. The Gateway can operate autonomously when astronauts are not there. It is a unique lunar space station that will operate in a special orbit where the Earth's and lunar gravity cancel each other, orbiting the Moon at 930 miles at the closest, and 43,500 miles when it is farthest away.

It will support Artemis astronauts on the lunar surface with broadband communications, logistics support, search and rescue operations, and emergency shelter. It may even support missions to Mars. When NASA de-orbits the ISS in 2030, the Gateway will be the only U.S. operated space station.

Meanwhile, China and Russia are teaming with other countries to build their own lunar space station - possibly the start a new space race. So far, 34 countries have joined the U.S. Artemis Accords in exploring the Moon. This book explores the what, where, how and when of the Gateway and sets forth the special features and safety of this deep-space US-led space project.

Joseph N. Pelton


Peter Marshall

ISBN 979883444394 90000
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There will have been over 30 years of experience with NASA sustaining astronauts safely onboard the ISS when this giant facility is deorbited in 2030. Instead of building a giant new space station, NASA plans to be the anchor tenant in two commercial space stations. The challenge of private companies designing, manufacturing, deploying and safely operating space stations is explored in this book. The greatest challenge may well be to provide safe long-term operation of these facilities that will include many innovations such as inflatable modules, and operations that are commercially supported in large part by visiting space tourists in addition to NASA astronauts.

Joseph N. Pelton with Peter Marshall "21st Century Space Stations" \$14.95 softcover (2022)

<https://www.amazon.com/21st-Century-Space-Stations-Approaches/dp/B0B2TF62PN>



21st Century Space Stations
New Approaches to Space Safety

By Joseph N. Pelton with Peter Marshall

21st Century Space Stations
New Approaches to Space Safety

Pelton and Marshall have once again teamed in their ongoing exploration of new space systems and astronaut safety. In this book, commissioned by the Space Shuttle Children's Trust Fund, they explore the history of space stations and their rapidly evolving future. They recommend over a dozen new ways forward to enhance safety, not only for astronauts but soon for private citizens as well.

The design and operation of space stations are going to change - big time. The next decades are going to see huge new patterns of change and innovation with new space stations in Earth orbit and around the Moon. Private space stations will become more common, while problems with space debris will increase safety concerns. China and Russia are pursuing new space initiatives for lunar exploration and lunar orbiting research habitats and the U.S. and NASA are pursuing totally new approaches. "New Space" innovations driven by billionaire innovators such as Elon Musk (SpaceX), Jeff Bezos (Blue Origin) and many other space entrepreneurs are reinventing the space industry - designing and building new reusable launchers, crewed spacecraft, and even private space stations. The study examines the many technological challenges as well as problems, accidents, and near-catastrophes narrowly avoided.

Joseph N. Pelton **Peter Marshall**

ISBN 9798830420037
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The Artemis Program seeks to go back to the Moon on a long-term basis at a location difficult to reach and communicate with at the planned base camp at the extreme South Pole location of the Moon. This mission will involve seeking to locate significant amounts of frozen water and volatiles. It also involves developing a wide range of technologies in terms of operating new launchers and crew exploration vehicles safely, operating a remote space station in lunar orbit, creating a lunar home base, operating advanced robotic systems, developing new space suit systems, and more. This book completes the sequence of studies commissioned by the SSC Trust Fund to assess NASA astronaut launchers and exploration vehicles, space station plans and operations, and many innovative systems to support space explorations over the next decade and beyond.

Joseph N. Pelton with Peter Marshal "Safety on the Moon" \$17.95 softcover and \$9.95 Kindle (2023)

<https://www.amazon.com/Safety-Moon-Artemis-Exploration-Program/dp/B0C2SFPPPZ>

