

# LEGO® SPACE

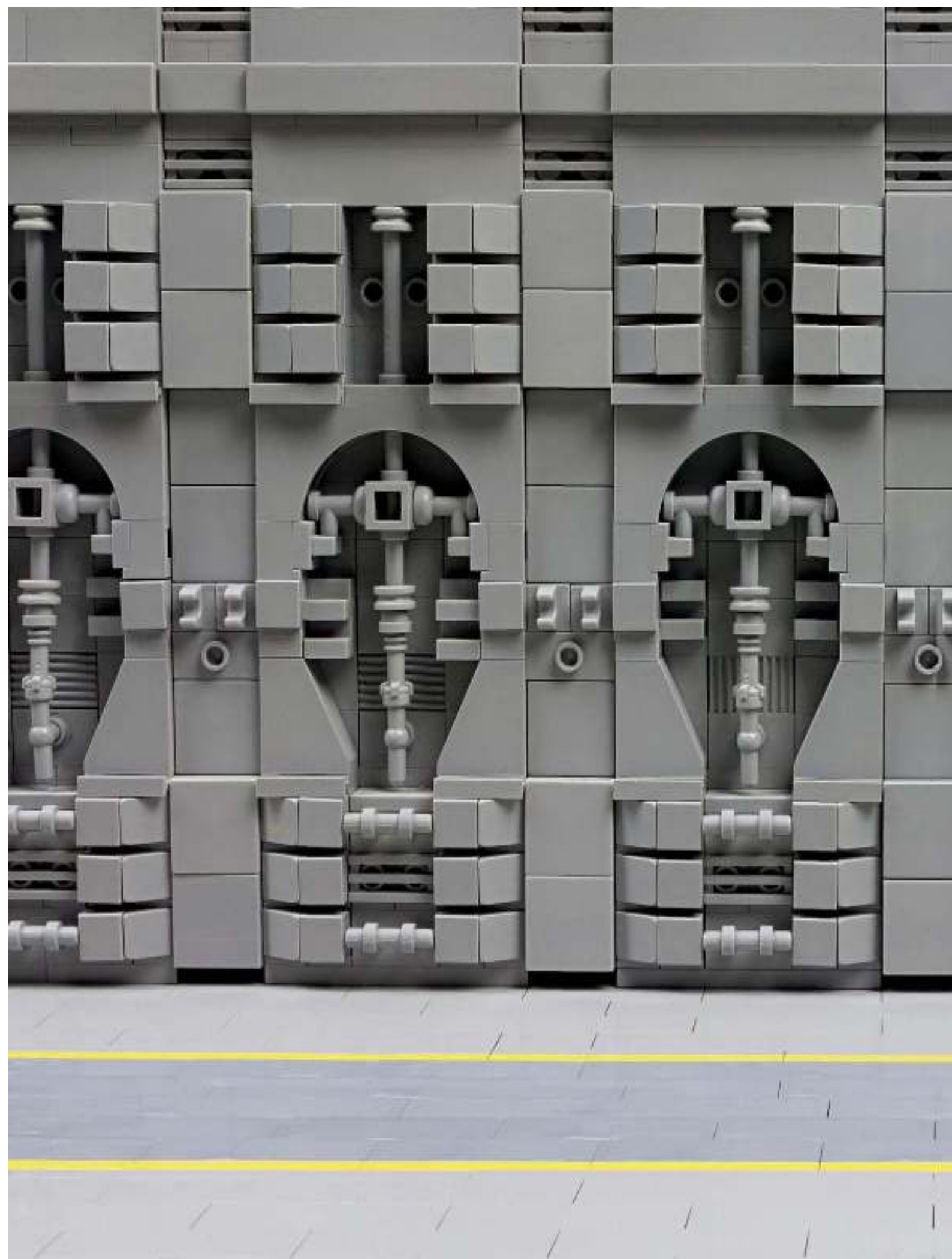
*BUILDING THE FUTURE*



PETER REID and TIM GODDARD





















# **LEGO® SPACE**

**BUILDING THE FUTURE**



**PETER REID and TIM GODDARD**



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San Francisco



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First printing

Printed in China

17 16 15 14 13 12 3 4 5 6 7 8 9

ISBN-10: 1-59327-521-8

ISBN-13: 978-1-59327-521-1

Publisher: William Pollock  
Production Editor: Serena Yang  
Cover Design: Tina Salameh  
Interior Design: Chris Sell  
Photographs: Ian Greig and Chris Sell  
Stock Images: NASA  
Building Instructions: James Shields  
Additional Valor Squadron Models: Andrew Hamilton  
Developmental Editor: Tyler Ortman  
Copyeditor: Katie Grimm  
Proofreader: Laurel Chun

For information on distribution, translations, or bulk sales,  
please contact No Starch Press, Inc. directly:

No Starch Press, Inc.  
245 8th Street, San Francisco, CA 94103  
phone: 415.863.9900; fax: 415.863.9950;  
info@nostarch.com; <http://www.nostarch.com/>

Library of Congress Cataloging-in-Publication Data

Reid, Peter, 1974-

LEGO space : building the future / by Peter Reid and Tim Gaddard.  
pages : cm

Summary: "A beautiful, four-color book that showcases an epic LEGO universe. Full of advanced models guaranteed to inspire, as well as simpler models with building instructions."-- Provided by publisher.

ISBN 978-1-59327-521-1 (hardcover) -- ISBN 1-59327-521-8 (hardcover)

1. Space ships--Models. 2. Astronauts--Models. 3. Extraterrestrial beings--Models. 4. Planets--Models. 5. LEGO toys. 6. Astronautics--Miscellanea. 7. Outer space--Miscellanea. 8. Science Fiction--Miscellanea. I. Gaddard, Tim, 1977- II. Title.

TL844.R45 2013

629.4022'8--dc23

201302036

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Production Date: July 24, 2013

Plant & Location: Printed by Everbest Printing (Guangzhou, China) Co. Ltd.  
Job/Batch #: 114805



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# THE SPACE AGE

*"Man must understand his universe in order to understand his destiny. Who knows what mysteries will be solved in our lifetime, and what new riddles will become the challenge of the new generations?"*

*—Neil Armstrong*









*Above: Radio operators in the United States were able to pick up Sputnik's signals. It came as a shock to learn that the USSR had pulled ahead in the Space Race.*

*Top: Sputnik spent three months circling Earth, traveling at speeds of around 18,000 miles per hour.*

In October 1957, an elite group of Soviet scientists made history. The world's first man-made orbital satellite, *Sputnik*, launched from the Tyuratam Complex in Kazakh. The event marked the dawn of the Space Age.

After blasting free from Earth's gravity, *Sputnik* settled into its planned orbit and began transmitting information back to Earth. The scientists were jubilant as they established radio contact with the world's first artificial satellite.

The compact sphere made a complete orbit every 96.2 minutes, transmitting a continuous pattern of beeps to radio operators across the globe. *Sputnik* exceeded its creators' expectations, dispatching information for 22 days before losing battery power. A valuable component of these signals was environmental telemetry, including atmospheric temperature and pressure readings. A decaying orbit drew the satellite slowly back to Earth, and after three months in space, *Sputnik* burned up as it reentered the atmosphere.



In response to the success of *Sputnik*, President Eisenhower ramped up the American space program and created the National Aeronautics and Space Administration (NASA). The failed launch of the American *Vanguard TV3*, just months after *Sputnik*, only increased NASA's resolve. Manned launches soon followed the satellites. Again, the Soviet Union won the race, with Yuri Gagarin being the first man to reach outer space. It was a unique age of scientific exploration.

Just 12 years after *Sputnik* orbited Earth, the first humans stepped onto the surface of the Moon. The American *Apollo* landings were a breathtaking demonstration of technology, engineering, and the human spirit.

But three years later, the lunar program came to an abrupt end. Sending astronauts to the Moon was prohibitively expensive, and public interest in the program was in decline. Plans for a manned mission to Mars were shelved as the projected budget spiraled out of control. The chance of mission failure, and subsequent loss of crew, was analyzed and deemed unacceptably high.



*Above: On July 20, 1969, Neil Armstrong became the first human to leave a footprint on the Moon's surface.*

*Neil Armstrong's first steps on the Moon were watched on television by an estimated 600 million people.*













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