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Titolo	Spacecraft operations // Florian Sellmaier, Thomas Uhlig and Michael Schmidhuber, editors
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ISBN	3-030-88593-3
Edizione	[Second edition.]
Descrizione fisica	1 online resource (610 pages)
Collana	Springer aerospace technology
Disciplina	629.4
Soggetti	Astronautics Space vehicles Space flight
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overview Space Segment Mission Operations Communication and Infrastructure Flight Dynamic System Mission Planning System Spacecraft Subsystems
Sommario/riassunto	This book describes the basic concepts of spacecraft operations for both manned and unmanned missions. The first part of the book provides a brief overview of the space segment. The next four parts deal with the classic areas of space flight operations: mission operations, communications and infrastructure, the flight dynamics system, and the mission planning system. This is followed by a part describing the operational tasks of the various subsystems of a classical satellite in Earth orbit. The last part describes the special requirements of other mission types due to the presence of astronauts, the approach of a satellite to another target satellite, or leaving Earth orbit in interplanetary missions and landing on other planets and moons. The 2nd edition is published seven years after the first edition. It contains four new chapters on flight procedures, the human factors, ground station operation, and software and systems. In addition, several chapters have been extensively expanded. The entire book has been brought up to date and the language has been revised. This book is based on the "Spacecraft Operations Course" held at the German

Space Operations Center. However, the target audience of this book is not only the participants of the course, but also students of technical and scientific courses, as well as technically interested people who want to gain a deeper understanding of spacecraft operations.
