

1. Record Nr.	UNINA9910484300903321
Autore	Evans Ben <1976->
Titolo	The Space shuttle : an experiment flying machine : thirty years of challenges // Ben Evans
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-70777-6
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XI, 291 p. 102 illus., 99 illus. in color.)
Collana	Space Exploration
Disciplina	629.441
Soggetti	Astronautics Space ships United States
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	List of Illustrations -- Preface -- Acknowledgements -- Chapter 1: A Butterfly and a Bullet -- Chapter 2: On the Ground -- Chapter 3: Blowing the Bolts -- Chapter 4: Riding the Main Engines -- Chapter 5: Big, Dumb Boosters -- Chapter 6: The External Tank -- Chapter 7: The Shuttle's Fragile Skin -- Chapter 8: The Short and the Long -- Chapter 9: Unexpected Failures -- Chapter 10: Sickness and Space Suits -- Chapter 11: Where to Land -- Index. .
Sommario/riassunto	This book explains how the achievements of the Space Shuttle, the world's first reusable manned spacecraft, were built on the foundation of countless technical challenges. Through thick and thin, the Space Shuttle remained the centerpiece of the American human spaceflight program for three decades. In addition to deploying satellites, planetary probes and, of course, the Hubble Space Telescope, it delivered astronauts to the Mir space station and assembled and sustained the International Space Station. Yet the path to these incredible achievements was never an easy one, with some obstacles resulting in the loss of life and other major consequences that plagued the fleet throughout its operational career. The book adopts a challenge-by-challenge approach, focusing on specific difficulties and how (if at all) they were fully overcome. Going beyond the technical issues, it relates

the human stories of each incident and how changes were effected in order to make the shuttle an exceptionally safer – though still experimental – flying machine.
