1.	Record Nr.	UNINA9911007077403321
	Autore	Bisplinghoff Raymond L
	Titolo	Aeroelasticity
	Pubbl/distr/stampa	Newburyport, : Dover Publications, 2013
	ISBN	0-486-13243-9
		1-62198-657-8
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (1577 p.)
	Collana	Dover Books on Aeronautical Engineering
	Altri autori (Persone)	AshleyHolt
		HalfmanRobert L
	Disciplina	629.132/362
	Soggetti	Aeroelasticity
		Mechanical Engineering
		Engineering & Applied Sciences
		Aeronautics Engineering & Astronautics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di contenuto	Cover; Halftitle Page; Title Page; Copyright Page; Preface Page; Contents; Chapter 1. Introduction to Aeroelasticity; Chapter 2. Deformations of Airplane Structures Under Static Loads; Chapter 3. Deformations of Airplane Structures Under Dynamic Loads; Chapter 4. Approximate Methods of Computing Natural Mode Shapes and Frequencies; Chapter 5. Aerodynamic Tools: Two- and Three-Dimensional in Compressible Flow; Chapter 6. Aerodynamic Tools: Compressible Flow; Chapter 7. Wings and Bodies in Three-Dimensional Unsteady Flow; Chapter 8. Static Aeroelastic Phenomena; Chapter 9. Flutter
		Chapter 10. Dynamic Response PhenomenaChapter 11. Aeroelastic Model Theory; Chapter 12. Model Design and Construction; Chapter 13. Testing Techniques; Appendices. Mathematical Tools; A Matrices; B Integration by weighting numbers; C Linear systems; References; Author Index; Subject Index
	Sommario/riassunto	Designed as both a textbook for advanced engineering students and a reference book for practicing engineers, this highly regarded work deals not only with the practical aspects of aeroelasticity, but the aerodynamic and structural tools upon which these rest. Accordingly,

the book divides roughly into two halves: the first deals with the tools and the second with applications of the tools to aeroelastic phenomena.Topics include deformation of airplane structures under static and dynamic loads, approximate methods of computing natural mode shapes and frequencies, two-and three-dimensional inco