

1.	Record Nr.	UNINA9910317625203321
	Titolo	Neutron Diffraction // edited by Irisali Khidirov
	Pubbl/distr/stampa	Rijeka : , : IntechOpen, , 2012 ©2012
	ISBN	953-51-4979-2
	Descrizione fisica	1 online resource (xi, 298 pages) : illustrations
	Disciplina	539.7213
	Soggetti	Neutrons - Diffraction Neutrons - Scattering
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references.
2.	Record Nr.	UNINA9910956250203321
	Titolo	Failure analysis of engineering structures : : methodology and case histories // V. Ramachandran ... [et al.] ; with contributions from T.A. Bhaskaran ... [et al.]
	Pubbl/distr/stampa	Materials Park, OH, : ASM International, 2005
	ISBN	1-62708-301-4 1-61503-105-7
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (213 p.)
	Altri autori (Persone)	RamachandranV
	Disciplina	624.1/71
	Soggetti	Structural failures Structural analysis (Engineering)
	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 (p. 199) and index.

""Contents""; ""Foreword""; ""Preface""; ""Failure Analysis: Why and for Whom?""; ""Common Causes of Failures""; ""Failure Analysis Methodology""; ""Examination Methods""; ""Advanced Techniques of Failure Analysis""; ""Explosive Sabotage""; ""Forensic Failure Analysis""; ""Failure Analysis and After""; ""Failure of a Throttle End Fitting in an Aircraft""; ""Failure of a Low-Pressure Turbine Rotor (LPTR) Blade""; ""Failure of Bolts in a Radar Antenna System Reflector Joint""; ""Failure of a Main Wheel Bearing Housing Flange in an Aircraft""; ""Failure of an Aircraft Engine Fuel Pump""
 ""Failure of an Adaptor Assembly in an Electronic Pod in an Aircraft""
 Failure of a Stabilizer Link Rod in an Aircraft""; ""Failure of a Tie-Rod in an Aircraft Towing Tractor""; ""Failure of a Tail Rotor Blade in a Helicopter""; ""Failure of a Wheel Hub in an Aircraft""; ""Failure of a Turbine Blade in an Aircraft Engine""; ""Failure of an Aileron Control Cable in an Aircraft""; ""Failure of a Fuel Pump in an Aircraft""; ""Failure of Center Support Bearings in an Aircraft Engine""; ""Failure of a Torque Sensor Bearing in an Aircraft Engine""
 ""Failure of a Universal Joint in an Undercarriage in an Aircraft""
 Failure of Dowel Bolts in an Aircraft Engine""; ""Failure of a Tail Rotor Blade in a Helicopter""; ""Failure of the Body Structure in a Helicopter at the Mixing Unit Attachment""; ""Failure of Elevator Hinge Pins in an Aircraft""; ""Failure of Aircraft Engine Compressor Rotors""; ""Failure of a First-Stage Compressor Blade in an Aircraft Engine""; ""Failure of Main Undercarriage Struts in an Aircraft""; ""Failure of a Quill Shaft""; ""Failure of a Cardon Shaft""; ""Failure of a Fuel Nozzle in an Aircraft Engine""
 ""Failure of a First-Stage Compressor Blade in an Aircraft Engine""
 Failure of Shutter Bolts in a Reaction Control Valve in an Aircraft""; ""Failure of a Second-Stage Compressor Blade in an Aircraft Engine""; ""Failure of a Second-Stage Turbine Blade in an Aircraft Engine""; ""Failure of a High-Pressure Turbine Blade in an Aircraft Engine""; ""Failure of a Compressor Blade in an Aircraft Engine""; ""Failure of a Low-Pressure Turbine Rotor (LPTR) Blade""; ""Cracking in the Wing Root Fitting in an Aircraft""; ""Failure of Quill Shafts in the Accessory Gear Box in an Aircraft Engine""
 ""Failure of a Compressor Blade in an Aircraft Engine""
 Failure of an Aileron Control Cable in an Aircraft""; ""Cracking of the Skin in the Main Rotor Blade in a Helicopter""; ""Cracking in a Tail Rotor Blade in a Helicopter""; ""Failure of a Wing Control Cable in an Aircraft""; ""Failure of the Nose Bullet in an Aircraft Engine""; ""Failure of Tail Boom Attachments in a Helicopter""; ""Cracking of Filter Components in an Aircraft""; ""Failure of an LP Turbine Disc in an Aircraft Engine""; ""Failure of a Cooling Fin in an Aircraft Engine""
 ""Failure of a Fourth-Stage Compressor Disc in an Aircraft Engine""

Sommario/riassunto

Failure analysts, practicing engineers, and students of engineering will find useful guidance and detailed examples in this reference work on the challenging and complex task of investigating service failures and accidents. Based on over four decades of fieldwork by the Failure Analysis and Accident Investigation Group at the National Aerospace Laboratories (Bangalore, India), chapters in the book cover common causes of failures with numerous examples, methodology of failure analysis including some advanced techniques, various mechanisms of failures and characteristic macroscopic and microscopic features that provide significant clues to their causes. The authors also provide exemplary coverage on the detection and identification of damage from explosive sabotage. A separate section with more than 50 case studies of service failures also provides valuable lessons for future designers, manufacturers, users, and maintenance personnel.

