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Altri autori (Persone)	MeierH. U (Hans Ulrich) CieslaBurghard StanewskyE
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Sommario/riassunto

This book is a translated edition of Die Pfeilfl elentwicklung in Deutschland bis 1945. The history of the development of the swept wing has been described several times during the last fifty years. But there has been no detailed description of how the original idea of the swept wing was developed into the reality that enabled highspeed flight. Together with six co-authors, Hans-Ulrich Meier investigated domestic and foreign libraries and archives to locate important original documents, including previously unavailable materials, to assess scientific and technical progress in using the swept wing in high-speed aircraft and missile projects between 1935 and 1945 in Germany. The book addresses the problems and questions concerning test and measurement techniques, aerodynamics, gas dynamics, and aeroelasticity, and experience gained in developing and testing the first jet aircraft and artillery rockets with swept wings and low aspect ratio wings. Because jet engine developments in Germany during this time period have been thoroughly documented elsewhere, only solutions concerning engine integration, engine intakes, and compressor development are presented here. The book concludes with selected examples of how the Allies utilized German knowledge.