

Contents

1	Overview and Motivation	1
	M. Kozek, A. Schirrer, B. Mohr, D. Paulus, T. Salmon, M. Hornung, C. Rößler, F. Stroscher and A. Seitz	

Part I Aircraft Design and Modeling

2	Conceptual Design	29
	H. Baier, M. Hornung, B. Mohr, D. Paulus, Ö. Petersson, C. Rößler, F. Stroscher and T. Salmon	
3	Numerical Simulation Model	47
	F. Stroscher, A. Schirrer, M. Valášek, Z. Šika, T. Vampola, B. Paluch, D. Joly, C. Breitsamter, M. Meyer, D. Paulus, T. Klimmek and H. Baier	
4	Reduced-Order Modeling	105
	M. Valášek, Z. Šika, T. Vampola and S. Hecker	

Part II Control Design

5	Control Goals	131
	C. Westermayer and A. Schirrer	
6	Feedback Control Designs	147
	A. Schirrer, M. Kozek, F. Demourant and G. Ferreres	
7	Feed-Forward Control Designs	227
	T. Haniš, M. Hromčík, A. Schirrer, M. Kozek and C. Westermayer	

Part III Validation and Discussion

8 Validation, Discussion and Outlook	267
M. Kozek, A. Schirrer, F. Stroscher, M. Valášek, Z. Šika, T. Vampola, T. Belschner and A. Wildschek	
Index	297

Modeling and Control for a Blended Wing Body Aircraft

A Case Study

Kozek, M.; Schirrer, A. (Eds.)

2015, XIV, 301 p. 200 illus., 158 illus. in color.,

Hardcover

ISBN: 978-3-319-10791-2