AEROSPACE MARKETING MANAGEMENT

AEROSPACE MARKETING MANAGEMENT

***Manufacturers • OEM • Airlines • Airports
• Satellites • Launchers***

by

PHILIPPE MALAVAL

Toulouse Business School (ESC Toulouse), France

and

CHRISTOPHE BÉNAROYA

Business Conseil, France

Springer Science+Business Media, LLC

Library of Congress Cataloging-in-Publication Data

Malaval, Philippe.

Bénaroya, Christophe.

[Marketing aéronautique et spatial. English]

Aerospace Marketing Management. Manufacturers - OEM - Airlines - Airports -
Satellites - Launchers / by Philippe Malaval and Christophe Bénaroya
p.cm.

Translation of: Marketing aéronautique et spatial.

Includes bibliographical references and index.

ISBN 978-1-4613-5377-5

ISBN 978-1-4615-1065-9 (eBook)

DOI 10.1007/978-1-4615-1065-9

Copyright © 2002 Springer Science+Business Media New York

Originally published by Kluwer Academic Publisher in 2002

Softcover reprint of the hardcover 1st edition 2002

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher,
Springer Science+Business Media, LLC

Printed on acid-free paper.

*This book was first published in France in October 2001, Pearson Education France, Paris.
Translated and published with permission of Pearson Education France.*

CONTENTS

<i>Preface</i>	<i>xv</i>
 <i>Chapter 1</i>	
<i>Marketing in the Aeronautics and Space Industry</i>	<i>1</i>
<i>1. The aeronautics and space sector environment</i>	<i>1</i>
1.1 Characteristics of the aeronautics and space sector	1
1.2 Market deregulation	2
1.3 The role of regulatory organizations: FAA, DGAC, CAA, IATA	3
<i>The organizations which control air transport</i>	<i>5</i>
<i>2. The marketing approach</i>	<i>9</i>
2.1 The rise of marketing	9
2.2 The two facets of marketing	11
2.3 An essential part of companies and organizations	12
2.4 A set of methods with wide-ranging applications	13
<i>3. The role of marketing in the aeronautics and space industry</i>	<i>14</i>
3.1 The growing importance of marketing in the aeronautics and space sector	14
3.2 Different types of marketing	15
3.3 Marketing in the aeronautics and space supply chain	18
3.4 Recent marketing trends in aeronautics	20
 <i>Chapter 2</i>	
<i>The Individual and Organizational Purchase</i>	<i>23</i>
<i>1. The individual purchase</i>	<i>23</i>
1.1 Factors influencing the buying behavior	23
<i>The child as influencer</i>	<i>25</i>
<i>Senior marketing</i>	<i>26</i>
1.2 The buying process	30
<i>2. The organizational purchase</i>	<i>34</i>

2.1 The buying center	34
2.2 Buying phases	37
<i>“Make or Buy ?”, the example of the Super Transporter: from Super Guppy to A300-600ST</i>	40
2.3 Different situations	42
2.4 The behavior of professional buyers	44
2.5 Bidding	47
2.6 E-procurement and the development of the marketplaces	49
3. Case study: the aircraft constructor’s approach to the airline’s buying center	51
3.1 First action level (1): the customer airline	52
3.2 Second action level (2): air traffic regulatory bodies	55
3.3 Third action level (3): airports	56
3.4 Fourth action level (4): passengers and citizen groups	56
4. Case study: Airing’s approach to the buying center of the Sultan of M	58
5. Purchase marketing	60
5.1 The different conceptions of purchase marketing	61
5.2 Purchase marketing objectives	61
5.3 Means of action	62
<i>Purchase marketing at EADS</i>	66
 Chapter 3	
<i>Business Marketing Intelligence</i>	75
1. The information system	75
<i>Dassault Aviation: Increasing Falcon customer satisfaction by using an efficient information system</i>	76
2. Market surveillance: active listening	78
2.1 The different types of surveillance	79
2.2 Setting up surveillance	80
<i>Docland: Aerospatiale-Matra’s information and documentation center (EADS)</i>	82
3. Information sources	82
3.1 Main information sources	83
3.2 Information protection	87
<i>Market studies made by Boeing and Airbus</i>	88
4. The main types of studies	95
4.1 Qualitative studies	96
4.2 Quantitative studies	97
<i>The international tourism study: a key analysis for airline destination strategy</i>	98
4.3 Permanent and ad hoc studies	101

4.4 The other objectives for studies	106
<i>From the Airbus A3XX project to the A380: the primordial role of studies</i>	109
 Chapter 4	
<i>Market Segmentation and Positioning</i>	115
1. Segmenting a market	115
1.1 The objectives of segmentation	115
<i>The segmentation of the satellite market</i>	116
1.2 The main segmentation methods	117
<i>An example of “top-down” segmentation applied to catering</i>	119
<i>“Bottom-up” segmentation: the example of the business jet market</i>	124
1.3 Other segmentation methods used in B to B	128
<i>The segmentation of the freight market</i>	131
2. Positioning	133
2.1 Positioning objectives	133
<i>Examples of positioning: AeroMexico and Thai Airways</i>	134
<i>Four examples of positioning: Singapore Airlines, Air France, Swissair, American Airlines</i>	136
<i>Two further examples: Virgin Atlantic and easyJet</i>	138
2.2 Setting up positioning	139
<i>Lufthansa Technik: positioning based on customer success</i>	143
 Chapter 5	
<i>Marketing and Sales Action Plan</i>	147
1. The marketing plan	147
1.1 Part one: the analysis	149
1.2 The objectives	152
1.3 The means or action plan	154
2. The sales action plan	156
2.1 The objectives of the sales action plan	157
2.2 How the sales action plan is carried out	158
2.3 An example of the contents of a sales action plan	159
 Chapter 6	
<i>Innovation and Product Management</i>	161
1. The learning curve	161
2. The product life cycle	163
2.1 Phases of the life cycle	164
2.2 Applying the life cycle concept	165
2.3 The characteristics of each life cycle phase	167
3. Managing the product portfolio	168

3.1 The BCG model	169
<i>An analysis of the Airbus and Boeing product portfolios</i>	172
3.2 The McKinsey model	174
3.3 The Little model	175
3.4 Marketing and management of the product portfolios	176
<i>The Bombardier niche strategy</i>	177
4. Managing the product range	178
4.1 The characteristics of the range	178
<i>The CFM International engine range</i>	180
5. Managing innovation	182
<i>Latécoère's innovation: on-board video systems</i>	182
<i>The different generations of a product: military aircraft</i>	184
5.1 In-house innovations: the "push" strategy	186
<i>Weber Aircraft: innovation at the heart of the offer</i>	187
5.2 Innovations from outside: the "pull" strategy	189
<i>The evolving range of Rolls-Royce Trent engines</i>	191
5.3 Product development phases	191
5.4 The conditions for successful development	194
<i>Innovation at Spot Image: Spot Thema</i>	196
6. Innovation, the key to development of the A380 wide-body jet	198
6.1 Analysis of the market and the range	198
6.2 Taking into account customer's expectations	199
6.3 Producing a solution	200
6.4 Innovation in the cockpit	201
6.5 Production innovation to reduce costs	202
6.6 The involvement of industrial partners	203
6.7 Cabin fittings	205
6.8 Future versions of the A380	207
 Chapter 7	
<i>Marketing of Services</i>	211
1. The characteristics of services	211
1.1 Intangibility	211
<i>On-line information: a service to increase maintenance efficiency</i>	212
1.2 "Perishability" and stock-impossibility	213
1.3 Inseparability	214
1.4 Variability	214
<i>Spot Image: a service with multiple applications</i>	216
2. Different categories of services	218
3. Professional services	220
3.1 Services which are required by law and regulations	221
3.2 More general services linked to management and strategy	222

3.3 The aeronautical “marketplaces”: a new type of service from MyAircraft to AirNewco	222
3.4 Services linked to the production process	227
3.5 Sales related services	227
3.6 Technical and commercial, global services	227
<i>Servair: a global service fulfilling the expectations of airlines and their passengers</i>	228
4. Consumer services: transport and tourism	230
<i>Qualifyer, airlines serving customers</i>	231
<i>Taking care of unaccompanied minors</i>	232
<i>An example of a health service: MEDjet International</i>	233
<i>The exemplary service quality of Thai Airways</i>	235
5. Focus on the freight market	238
5.1 The evolution of the freight market: expansion of the “integrated” carriers	240
5.2 The reaction of the cargo airline companies	243
 Chapter 8	
<i>Pricing Policy</i>	245
1. Factors involved in pricing	245
1.1 External constraints	246
1.2 Internal constraints	250
<i>The business plan or forecasting financial profitability</i>	251
2. Pricing approaches	254
2.1 Cost-based pricing	254
<i>Example of a modulated pricing policy for domestic Air France flights</i>	256
2.2 Value-based pricing	256
<i>Helicopter engine manufacturers: taking into consideration the market and after sales in the pricing policy</i>	259
2.3 Bidding	262
3. Pricing strategies	263
3.1 The skimming strategy	263
3.2 The penetration strategy	264
<i>Charter on-line business aircraft</i>	265
3.3 Flexibility strategies	266
3.4 Yield management	266
<i>Bold easyJet: Internet, yield management and non-conformism</i>	268
3.5 The development of the “gray market”	270
4. Price-adjustment policy	270
4.1 Adjusting the conditions of sale	270
4.2 The leasing	272
4.3 The development of fractional ownership on the business aircraft market	274
<i>The NetJets (from Executive Jet) fractional ownership program</i>	274

Chapter 9	
<i>Selecting Distribution Channels and Sales Team Management</i>	277
1. Logistics	277
2. Choosing a distribution system	280
2.1 Choosing an external solution	281
2.2 Choosing multi-brand or exclusive distributors	281
<i>Breitling's selective distribution</i>	282
2.3 Selecting partners and managing the network	282
<i>The development of e-ticketing</i>	284
3. Managing the sales point: adjusting supply to demand	286
3.1 The basis of the merchandising approach	286
<i>Travel agency merchandising</i>	287
3.2 Merchandising objectives	289
<i>A special application of merchandising: managing spare parts</i>	290
4. Direct channel: the role of the sales representative	291
4.1 Communication	291
4.2 Pre-sales: prospecting	292
4.3 Sales presentation and negotiation	293
4.4 After-sales: the follow-up	294
<i>The recent evolution of sales representatives</i>	294
4.5 Information feedback	295
<i>The sale of aircraft</i>	295
5. Managing the sales team	296
5.1 Defining objectives	297
5.2 Choosing the structure	298
5.3 The size of the sales team	299
5.4 Recruiting sales representatives	299
5.5 Supervising the team	300
5.6 Remunerating sales representatives	301
5.7 Sales representatives: motivation, training and career management	304
Chapter 10	
<i>Project Marketing</i>	307
1. The specific nature of project marketing	307
1.1 High financial stakes	307
<i>The Beijing Capital International Airport</i>	308
1.2 A "one-off" project	309
1.3 Generally predefined buying procedures	310
1.4 A generally discontinuous supplier-customer relationship	312
2. Building demand	313
2.1 Identifying the customer's latent demand	313

2.2 Helping to formulate dissatisfaction	313
2.3 Developing a solution	314
An example of constructing demand: building industry and airports	314
2.4 Drafting a solution	316
3. Customer intimacy	317
3.1 The depth of the interaction	317
3.2 The extent of the interaction	318
4. Influencing specifications	320
4.1 Intervening upstream of the deal	320
Industrial partnerships to win bids: the tender concerning missiles for the British Eurofighter	321
4.2 Intervening in the deal	322
Services at the very heart of the creative bid strategy: application to the military market	324
 Chapter 11	
Communication Policy	327
1. Different types of communication	327
1.1 The objectives of communication	328
1.2 The four main types of communication	330
2. The communication plan	337
2.1 Determination of targets and budgets	337
2.2 Setting up the communication plan	341
 Chapter 12	
Selecting Media	347
1. Trade shows	347
1.1 The specific nature of trade shows	347
1.2 Exhibiting at a show	352
The Paris Air Show – Le Bourget: the leading international aeronautics and space show	354
1.3 The different stages of participating in a show	356
2. The trade press	358
2.1 Main characteristics	358
Aviation Week & Space Technology	358
2.2 Resources and tools	364
3. The Internet	366
Boeing and the Internet	369
4. Direct marketing	371
4.1 The objectives of direct marketing	371
4.2 The different tools	372
5. Television, billboards and radio	373

5.1 Television	373
<i>An original operation: Airbus Beluga "Delacroix"</i>	374
5.2 Radio	375
5.3 Billboards	376
6. Lobbying	377
<i>Lobbying the regulatory organizations</i>	378
<i>Lobbying for the Airbus Military Company A400M project</i>	379
7. Public relations and sponsoring	388
7.1 Public relations	388
7.2 Sponsoring	390
8. Sales promotion	391
<i>Frequent Flyer Programs (FFP)</i>	392
<i>The example of Spot Image's promotion for the launch of SpotView</i>	396
 Chapter 13	
<i>Brand Management</i>	399
1. Brand foundation	399
1.1 Brand mechanisms	400
1.2 Brand functions for the company	404
1.3 Brand functions for the customer	406
<i>Aeronautics and space brands and performance facilitation</i>	413
2. Special characteristics of the industrial brand	413
2.1 "Purchaseability" levels of the industrial brand	414
2.2 The visibility strategy	415
2.3 Airbus: "Setting the Standards"	418
3. Industrial brands classification	424
3.1 According to the use of goods	424
3.2 According to international brand policy	424
3.3 According to brand origins	425
4. Visual identity code, logos and slogans	436
4.1 Logos	436
4.2 Slogans	439
4.3 Jingles	441
4.4 Visual identity code	441
5. Latécoère: technical partnership and its own products	442
5.1 The rise of Latécoère	442
5.2 Latécoère, technical performance facilitator brand	444
5.3 Sales performance facilitation	447
6. Zodiac: managing a brand portfolio by sector	447
6.1 History	447
6.2 Zodiac today	449
6.3 Brand policy	450

Chapter 14***Building loyalty: Maintenance, Customer Training and Offsets* 455*****1. Maintenance* 455*****A key to aircraft safety* 461**

1.1 The different forms of maintenance 462

1.2 Maintenance: a tool for the marketing-mix 466

1.3 Maintenance: a tool for the marketing information system 467

Airbus' after-sales marketing function: 4 main objectives* 469**2. Customer training* 472*****Pilot training: a major and essential expense* 472**

2.1 Different training objectives 473

2.2 The contents of training 474

***Training, an essential part in the Airbus strategy* 475**

2.3 The main types of training 481

GDTA: cutting-edge training* 482**3. Offset, a business tool* 484**

3.1 Offset: a means of payment 484

3.2 A business argument 487

Chapter 15***Alliance Strategies* 491*****1. Traditional forms of company development* 491*****2. Specific objectives of alliances* 492**

2.1 Financial objectives 493

2.2 Marketing and sales objectives 494

2.3 The international political stakes 498

***3. Different forms of alliances* 498**

3.1 Tactical alliances 501

3.2 Strategic alliances while maintaining the company's initial identity 502

Star Alliance: a worldwide air network* 505**SkyTeam: a new worldwide air network* 507**

3.3 Strategic alliances with creation of a specific structure 512

The CFM International alliance* 512**Starsem: an alliance for a reliable and competitive space transport system* 516*****Sea Launch: from the sea into space* 521**

3.4 From alliance to merger 522

From GIE Airbus Industrie to the integrated company EADS* 523**Eurocopter: once a joint-venture, today a subsidiary* 525*****Bibliography* 529*****Subject index* 533**

PREFACE

This book presents an overall picture of both business to business and business to consumer marketing in the aeronautics and space sector. Designed to be a practical handbook, it deals with all of the basic marketing concepts and tools, both from an operational and strategic point of view.

Aeronautics and Space Management is the first marketing manual entirely illustrated with examples taken from the aerospace sector: parts suppliers, aircraft builders, airlines, helicopter manufacturers, aeronautics service providers, airports, defense and military companies, satellites integrators, and space launchers, among others.

Organized so as to allow the reader to select those chapters that are most useful to him or her, it does not require prior in-depth marketing knowledge. While it is not exhaustive, particularly concerning the buying process or segmentation, it does address the most recent marketing trends (e-marketing, one-to-one marketing, customer orientation, project marketing...). Accessible to a wide public, this book was written in particular for executives working in the field as well as for students from Engineering and Business Schools.

The main marketing tools are discussed from purchase marketing, market surveillance and surveys, quality management and norms on the one hand, to trade shows, the trade press, direct marketing, public relations, lobbying, maintenance, customer training and offsets on the other. There is also a chapter focusing on branding strategy and brand management, in particular their role in facilitating customer performance, as well as a chapter on the project marketing approach. Last but not least, Chapter 15 presents the alliance strategies of the leading aeronautics manufacturers, part suppliers and airlines.

For their encouragement, trust and the information they have graciously provided, we would like to thank the companies mentioned in the book and in particular:

- Aeromexico: José Diaz de la Rivera
- Aéroports de Paris: Jacques Reder, Isabelle de Villeneuve, Catherine Bénétreau, Corine Bokobza-Servadio
- Aéroport de Toulouse-Blagnac: Michel Gay
- Air & Cosmos: Jean-Pierre Casamayou
- Air & Space Europe: Jean-Pierre Sanfourche
- Air Cargo News: Geoffrey Arend
- Air France: Laurent Clabé-Navarre, Benoît Guizard, Georges Rochas, Pierre-Yves Reville, François Roppe
- Airbus / EADS: Michel Guérard, Roland Sanguinetti, Claire Labedaix, Gilles Meric, Bruno Piquet, David Jennings, Richard Carcaillet, Jean-François Lasmezas, Bernard Bousquet, Philippe de Saint-Aulaire, Philippe Girard, Didier Lenormand, Françoise Soulier, Jérôme Verzat, Jean-Bernard Oresve, Anne Carrere, Daniel Baubil, Jean-Marc Thomas, Patrick Roger, Alain Vilanove
- Alcatel Space Industries: Thierry Deloye, Dominique Murat, Christiane Grimal, Rémy Sergent
- Alcatel: Caroline Mille
- AlliedSignal Aerospace: Bettina Pei-Ching Li
- American Airlines: Michael Gunn, Talcott J. Franklin, Phyllis J. Sawyers
- ATR: Carlo Logli, Bernard Fondo, Jacques Dronnet
- Aviapartner: Hervé Bonnan
- Aviation International News: Charles Alcock
- Aviation Sales Company: Dale Baker
- Aviation Week & Space Technology: Mark A. Lipowicz, Pierre Sparaco
- BAe Systems: Richard H. Evans, Nina Collins
- Bell (Textron): Dave Wyatt, Jenny Jackson, Robert N. Kohn
- BFGoodrich Aerospace: David L. Burner, Marshall O. Larsen
- Boeing: Philip M. Condit, Dan Kays
- Bombardier / Canadair: Yvan Allaire, Catherine Chase, Leo Knaapen
- Breitling: Nathalie Frésard
- Cathay Pacific: Nicholas Reynolds
- CFM International / Snecma: Pierre Bry, Sylvie Béamonte, Olivier Laroche, Nadia Zaïdi, Jean-Paul Rouot, M. Hucher, Jacques Geneste
- Civil Aviation Authority, CAA: Malcom Field, Douglas Andrews
- Dassault Aviation: Nicolas Renard

- Direction Générale de l'Aviation Civile, DGAC: Jacques Girerd, Brun-Potard, Philippe Beghelli
- easyJet: Toby Nicol, Samatha Day
- École Nationale Supérieure de l'Aéronautique et de l'Espace (Supaero): Pierre Jeanblanc, Chantal Gauthier, Joël Daste
- Eros: Denis Taieb
- Euresas: Sabine Kramer, William Gibson
- Eurocopter: Alain Journeau, Jean-Louis Boireau
- Euromissile: Jean Thyraud
- Explorer Consulting Company: Laurent Husson
- Farnborough: Maureen Symester, Linda Lloyd, Lindsey Hart
- Federal Aviation Administration, FAA: Norm Simenson
- Fedex: David J. Bronczek
- Foster and Partners: Norman Foster, Katy Harris
- GDTA: Jean-Luc Bessis
- GEIA: Dan Heinemeier, Jim Serafin, Mary Petitt, Michael Dooner
- General Electric: John F. Welch, David L. Calhoun
- Gore-Tex: Édouard Frignet des Préaux
- Institut Aéronautique et Spatial: Hervé Schwindenhammer, Michel Chauvin, Alain Riesen
- Jane's Airport Review: Alan Condron
- Latécoère: François Junca, Jean-Pierre Robert, Philippe Martin, Raphaël Bolzan
- Lockheed Martin: James Fetig, Lee Whitney
- Lucas Aerospace (TRW): Joseph T. Gorman, William K. Maciver
- Lufthansa Technik: Aage Duenhaupt, Angelika Albert-Graffert, Claudia Ungeheuer
- MartinBaker America: Bill Harrison, B.A. Miller
- Medjet: Jeffrey Tolbert, Sam Jackson, Stan Bradley, Debbie L. Ebner
- Messier-Dowty: Philippe Merle
- Motorola: Christian Ollivry
- Pechiney Aerospace: Caroline Lenglin, Jean-Claude Nicolas
- Rockwell-Collins: Jack Barbieux
- Rolls-Royce: John Purcell, John Crocker, Richard Deeks
- Royal Air Maroc: Asmaa Oudghiri, Nezha Alaoui, Karina Marmech
- Sea Launch: Terrance Scott, Glenn Anderson
- Sennheiser: Karlheinz Koinzack
- Servair: Jean-Luc Neiryneck, Nathalie Hedin, Sandrine Audivert,
- Smiths Industrie: Jennifer Villarreal
- Spot Image: Alain Hirschfeld
- Starsem: Claire Coulbeaux, Romain Lavault
- Swissair: Michael Eggenschwiler

- Thai Airways: Pascale Baret
- Thalès Detexis (ex-Thomson-CSF): Gérard Bouy, Jean-Paul Perrier, Jean-Luc Pomier, Carole Caubet
- Turbomeca: Guillaume Giscard d’Estaing, Jean-Marc Soulier
- Virgin Atlantic: Charlotte Tidball
- Weber Aircraft: William Chase
- Zodiac: Dominique Puig.

We would like to thank the “Delegates” of the Aerospace MBA of the Toulouse Business School (ESC Toulouse) and our students who have indirectly contributed to this book thanks to their remarks and suggestions, and in particular:

- Nathalie Brun, Jun Cao, Robin Calot, Nicolas Coma, Olivier Courrèges, Thierry Debergé, Vincent Ducamin, Esmeralda Herrera, Julien Joncquiert, J. C. Jong, Thomas Lelièvre, Benoît Machefert, Olivier Malavallon, Gaël Maugendre, Hakim Messoussa, Laurence Milhade, Guillaume Pellegrino, Thomas Pelon, Göknur Pilli, Olivier Royer-Manoha, Xavier-Alexandre Scalbert, Vincent Varnier.

We would also like to thank of course Toulouse Business School (ESC Toulouse) for its support and in particular:

- Hervé Passeron, Andres Atenza, Jean-Luc Guiraud, Jonathan Winterton, Denis Lacoste,
- Florence Lévy and the whole Documentation Center,
- Jean-Luc Bouchot and his team.

Thanks to Geoffrey Staines of Pearson/Publi-Union as well as Monika Neumann for authorizing this American edition. Thanks to Marika Seletti and Adrian Pavely for the translating of the English version.

We are deeply grateful to our parents and our respective families. Thanks in particular to Christine for her kind understanding and support. Thanks to Isabelle and to my children Guilhem, Bertrand, Robin and Marion.