

STAR KITES

Maurizio Angeletti

STAR KITES

EnnoiaBooks

Maurizio Angeletti
STAR KITES
EnnoiaBooks, 2019

ISBN 979-12-200-4796-8

Layout realized by the author with EazyDraw
software (Version 9.9) produced by Dekorra Optics,
LLC. (<https://www.eazydraw.com>)

Text, layout and diagrams © Maurizio Angeletti,
1984-2019.
All rights reserved

No part of this publication may be reproduced or
used in any form by any means without the prior
written permission of the author.

The right of Maurizio Angeletti to be identified as
the author of all the artistic and literary work shown
in this book has been asserted by him in accordance
with the Copyright, Designs and Patents Act 1988.

Printed in Italy by AZEROprint
(www.azeroprint.com)

Dedicated to my kite friends Axel Voss (1946-2012) and Joe Vaughan (1930-2016)

TABLE OF CONTENTS

Part One - A BIRD'S EYE VIEW	1
The Oldest and Prettiest of All Flying Machines	3
The Sky	8
The Aesthetics of Kites	14
Kite Design	23
The Dynamics of Flying Kites	37
 Part Two - MATERIALS, METHODS, TOOLS AND TECHNIQUES	 127
Principles of Bridling and Framing	129
Main Criteria for Construction	142
Building Your Own Workshop	144
Tools and Techniques	161
Materials	194
Safety Precautions for Kite Makers	204

Part Three - STAR KITES TO MAKE AND FLY	209
Flat Paper Kites	211
Structural Properties of Fabric under Tension	237
Facetology	240
Reflexes: Non-Facet, Facet-Like Kites	281
Beams, Crystals, Flakes and Sparks	309
Radial Structures with Spars under Compression	346
Trains, Stacks, and Multiple Configurations	378
Millestelle	417
 AFTERWORD	 496
BIBLIOGRAPHY	497
INTERNET LINKS	498
INDEX	499
PHOTO CREDITS	508
THANKS	511
BIOGRAPHICAL NOTES	512

Part One

A BIRD'S EYE VIEW



