MIKE ASHEY
PRODUCTIONS

# DETAILING SCALE MODEL AIRCRAFT

by Mike Ashey







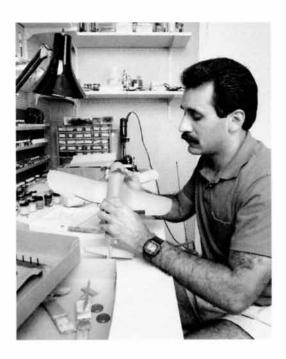
The complete guide to detailing, scratchbuilding, and modifying scale model aircraft

### **ABOUT THE BOOK**

This is the most comprehensive book on detailing model aircraft ever written. It documents with step-by-step detail and hundreds of closeup photographs how to turn an average model into a detailed masterpiece. Dozens of simple techniques will teach you how to add detail to cockpits; scratchbuild interiors, seats, and seat frames; and add interior details such as piping, switches, and dials.

You'll learn how to modify and improve kit-supplied parts; detail engines and intake and exhaust ports; how to add detail to wheel wells and landing gear; how to remove, modify, and reattach control surfaces, hatches, and access panels; and add rigging and control cables to biplanes. An entire chapter is devoted to tips and techniques on everything from seam removal to masking clear parts and applying and weathering decals. Whether your modeling tastes are propeller-driven aircraft from the First or Second World War or the sleek jet fighters of today, this book is for you!

### ABOUT THE AUTHOR



Mike Ashey lives in Tallahassee, Florida, with his wife, Kelly, and their two sons, Thomas and Gregory. Mike is a member of IPMS, and he has been building models since the early sixties. His interests are primarily aircraft and ships, although he does indulge in a tank every now and then. He has an undergraduate degree in Ocean Engineering, and aside from building models he enjoys writing, SCUBA diving, flying, staying in shape, and being a father to two future model builders. He spent four years in the U.S. Marines and was honorably discharged as a Sergeant. He worked for the Department of the Navy as a senior engineer and project manager, and as a technical advisor for the Navy's elite SEAL combat force. Presently Mike is heavily involved in environmental protection and is a Bureau Chief for Florida's Department of Environmental Protection.

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The Complete Guide to Detailing, Scratchbuilding and Modifying Scale Model Aircraft

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PRESENTS

### DETAILING SCALE MODEL AIRCRAFT

## Computer Formatted Into ADOBE FILE TITLES

Each chapter of the book is contained in a separate Adobe file For easy access, viewing, enlarging and printing.

**General Book Information** 

Cover, Dedication, Preface, Index, Manufacturers and Suppliers

Chapter 1

Modeling Tips and Techniques

Chapter 2

Cockpits

Chapter 3

**Engines** 

Chapter 4

Landing Gear

Chapter 5

Guns, Flying Wires, Control Cables & Antenna Wires

Chapter 6

Removing & Reattaching Kit Parts

#### For my parents, Joseph and Marie Ashey, and my sons Thomas and Gregory

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On the cover, top to bottom: Douglas EB-66E, manufactured by Testors, Inc.;1/72 scale kit built by Major Billy Crisler, USAF. Center: DH-82 A/C Tigermoth, manufactured by Matchbox, Inc.;1/32 scale kit built by Mike Ashey. Bottom: EA-6B Prowler, manufactured by Monogram Inc.;1/48 scale kit built by Scott Weller. Cover photos by Glenn Johnson Photoillustration of Tallahassee, Florida

#### ACKNOWLEDGEMENTS

There are many people who helped me over the years and in many ways, both directly and indirectly, contributed to the ultimate formulation and completion of this book. Special thanks are due to Dr. Mia Anderson of Bergen Community College, Paramus, N.J. for awakening within me the gift of writing; Dr. Ray McAllister for his mentoring over the years; the Hobby Caboose of Tallahassee, Florida and the Big Bend Modelers Club for giving me a forum to present my modeling ideas, techniques and achievements; Glenn Johnson of Tallahassee, Florida for his photography work and patience; Scott Weller and Richard Boutin Sr. of Tallahassee, Florida and Major Billy Crisler, USAF for allowing me to include some of their models in this book; Terry Spohn for his advice; Joel and Marian Swanson for their encouragement and support; and most importantly, to my wife Kelly who is my chief editor and critic.

All photos are by Mike Ashey or Glenn Johnson.

#### **FORWARD**

Over the years I have often wondered what it is about this hobby that makes it so special to me. I guess that, above all other reasons, it helps me to connect with my childhood and the many things that were so special about being a kid. It all started when my Dad took me along for a ride one warm summer day in 1964 and we visited a place called Vince's Hobby store in Clifton, New Jersey. I will never forget the impression it left on me. The store was a wonderland of electric trains, gas powered airplanes which hung from the ceiling and were almost as big as me, and walls lined with plastic models of every type. On that special day we bought a ship model which we built and floated in the tiny pool my Dad had set up for my brothers and I. I can not remember how many times I broke and repaired that model, but it kept me occupied and it made me hunger for more models.

Sometime after my first model I discovered that the local hardware and repair store, which was within biking distance, carried model airplanes and within a year or two the ceiling of my room was cluttered with Aurora, Revell, Hawk and Monogram kits of every type. I spent every dime of my paper route money on models and long hours in the basement building them. I can vividly remember those warm summer days as I rode my bike to the store while I fantasized about what it must be like to actually fly the airplane I had picked out the previous week to buy, and my dreams were always filled with fighter pilot Mike Ashey's courageous exploits.

As I look back on those years I have come to understand that building all those models served many purpose, besides keeping me out of trouble. Building models gave me an outlet to express my fledging creativity which has developed to the point that now I can look at a plain, basic, stripped down model and picture it as a finely detailed model simply by changing the picture of it in my head. It honed my skills at following instructions to assemble things, which translated to following machinery diagrams and blueprints in my later years. It has allowed me to become very adept at discerning spacial relationships of equipment, buildings and site plans which comes in handy as a practicing field engineer. It developed my common sense problem solving skills and instilled in me a sense of symmetry and organization. All of these attributes that I now have and which serve me well in life I can attribute in some measure to quite a few 98 cent models and 5 cent tubes of Testors glue.

Although the model industry is better now than it has ever been before, something has been lost. Amongst all the fancy high tech kits, resin accessories and photoetched parts we have lost the true sense and pleasure of the hobby. Many models are expensive almost to the point of being absurd, and many after market products cost as much or more than the kits themselves. With all the hype about the recessed panel lines of this model or the highly detailed wheel wells of that model we have forgotten about the kid on the bike who yearns to expand his or her creativity and let his or her imagination run wild. We are in the process of loosing an entire generation of modelers because the majority of the industry is focusing on adults instead of seeking a balance. The future generation of our hobby is growing up on electronic games and most of them will never experience all the positive attributes that this hobby has instilled in us adults. As a result, they may never benefit from all the by products that model building can bestow upon a young mind and propel a young man or woman to success. If we do not address this problem, at some point in the near future a vacuum will be created in the industry because their customer base is going to suddenly shrink and our hobby will suffer.

I can not say enough good things about those manufacturers that strive to seek a balance between all age groups and offer low cost models to our kids. I wrote this book in an effort to reintroduce to the modeling community the art of creativity, imagination and ideas and to remind all of us that there is life beyond the high priced, high tech kit and that to invest in the kid on the bicycle is the best investment we can make.

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## **CONCLUSION**

After you have selected the model you want to build, you should also decide what details, modifications, and scratchbuilding you want to add before you begin to build. If you were to try all the techniques and projects presented in this book at one time, it would overwhelm you. Pick two or three of the techniques that intrigue you most, then continually add to your list of accomplishments as you build more models. I also encourage you to improve and modify my techniques. There is often a different or better way to achieve the same results. Aside from the fun of trying something new, it will stretch the bounds of your creativity and your imagination.

It is also important to keep in mind that you are going to have a few disasters along the way. Even when your modeling skills are advanced, you will still have disasters. Any modeler who says he or she does not is either lying or does not truly build models. So take a break if you get to the point where you have that wild urge to test-fly your model across the free space of your workroom. It's only a hobby, and it is supposed to be relaxing, not raising your blood pressure! Happy modeling—and please do not forget the kid on the bike who yearns to be creative and imaginative.

## MANUFACTURERS AND SUPPLIERS

Badger Airbrush 9128 West Belmont Ave. Franklin Park, IL 60131 (Airbrush Equipment)

Bare Metal Foil Company P. O. Box 82 Farmington, MI 48332 (Plastic polish and plastic scriber)

Borden Inc. Department CP Columbus, OH 43215 (White glue)

Creations Unlimited Hobby Products 2939 Montreat Dr. N.E. Grand Rapids, MI 49509 (Flex-I-File and sanding sticks)

Devcon Corporation Danvers, MA 01923 (Two-part epoxy)

Dremel 4915 21st St. Racine, WI 53401-9989 (Drill bits, cutters, drill press and drill press vise)

Evergreen Scale Models 12808 N.E. 125th Way Kirkland, WA 98034 (Plastic strips and sheeting)

Floquil-Polly S Color Corporation 4715 State Hwy. 30 Amsterdam, NY 12010-9204 (Paints, plastic prep and paint/decal remover)

K & S Engineering Co. 6917 59th St. Chicago, IL 60638 (Sandpaper)

Loctite Corporation Cleveland, OH 44128 (Super glue)

Micro Mark 340 Snyder Ave. Berkeley Heights, NJ 07922-1595 (Hobby Supplier)

Microscale Industries, Inc. 1570 Sunland Lane Costa Mesa, CA 92626 (Decal setting solution)

Model Technologies 13472 Fifth St., Suite 12 Chino, CA 91710 (Photoetched parts)

Pacer Technology 9420 Santa Anita Ave. Rancho Cucamonga, CA 91730 (Super glue accelerator)

Scotch 3M Painters Masking Tape Box 33053 St. Paul, MN 55133 (Masking tape) Small Parts Inc. 13980 N.W. 58th Ct. P. O. Box 4650 Miami Lakes, FL 33014 (Steel wire and hollow wire)

Squadron Shop 1115 Crowley Dr. Carrollton, TX 75011 (Putty)

Super Scale International, Inc. 2211 Mouton Dr. Carson City, NV 89706-0471 (Decals, decal setting solutions, and white glue)

Testors Corporation 620 Buckbee St. Rockford, IL 61104-4891 (Paints, putty, sandpaper, and glue)

Verlinden Productions Lone Star Industrial Park 811 Lone Star Dr. O'Fallon, MO 63366 (Model accessories)

Waldron Model Products
P. O. Box 431
Merlin, OR 97532
(Waldron punch set, placards, instruments, and photoetched parts)

X-Acto, Division of Hunt Mfg. Co. 230 S. Broad St. Philadelphia, PA 19102 (Blades and cutting tools)