Foreword

Have you every wanted a model of a subject, but couldn't find a kit? Or, maybe you found a kit, but it didn't meet your expectations? I think it's safe to say we've all been in this predicament at one time or another. The solution is simple: Just build it from scratch.

Well, we all know from experience, it's not quite *that* simple. The key elements of scratch-building are *research*, *blueprints* and *construction*. In the past, reference material was basically limited to books and articles. With the advent of the Internet, however, all this has changed. The Web has given us the ability to share information with people all over the world. A quick search of the Internet can yield a bounty of excellent reference material. So, this first important element needed to build a project from scratch can now be done quickly.

The next element is often not so easy to come by – the dreaded blueprints. Without a decent set of plans, most scratch-building projects are doomed. Unless you are lucky and happen to find an existing set of plans during your research, you are left to create your own.

This book is dedicated to helping you develop your own blueprints quickly and easily. Just as the Internet helps you with research, the computer is a powerful tool for drawing plans and blueprints. There are a number of programs available that make drawing plans quick and easy. Some are even free. No matter what method or program you choose, the ideas and concepts in this book will show you how it's done.

I've been a modeler for nearly 40 years. I've spent the last 26 years of my life as a professional engineer/draftsman, working on everything from swimming pools to large jet aircraft. Twenty years of that time has been spent using CAD ("Computer Aided Drafting"). I even taught classical drafting (paper and pencil) for five years.

I have always enjoyed drawing plans and scratch-building everything from kites and R/C planes to fictional spacecraft. But, it wasn't until I began using *AutoCAD* that I started exploring the world of "virtual" model design and building.

The first subject that I used the principals discussed in this book to recreate was the *WarHawk*, a ship from the short-lived 70's TV show *Buck Rogers in the 25th Century.* The second season of the show opens with Buck engaged in combat with Hawk. Here was a ship designed to look like a bird of prey, from the hooked beak right down to the talons used to capture its prey. Now, I always liked Buck's *Thunderfighter* and I even built the Monogram model kit that was issued, but Hawk's ship just captivated my imagination.

From the first time I saw it, I knew that I wanted to build a model of this subject, but the reference information needed was practically non-existent. All I could find were a few pre-

production concept sketches and a VHS tape of the show – not much at all. For years I held out, thinking someone would build a model or that more pictures would become available. But, neither happened.

In early 2000, I gathered together the numerous sketches and notes I had made over the years from watching the now-worn-out tape. I sat down at my computer with my notes and *AutoCAD*® software and started designing plans for the *WarHawk* from scratch. It took some time, but, using many of the concepts described in this book, I was able to create my first set of blueprints using only photos as reference.

Since then, I have done this for all types of subjects. I feel confident in saying this book will be useful for anyone interested in scratch-building their own models – whether "CG" or real. Any modeler will find this book to be a valuable asset when it comes to exploring the world of scratch-building.

The information here is presented in a way that one does not need to be a professional draftsman to be able to understand and use it. Some of this info cannot be found in any drafting textbook as it represents years of experience and trial and error spent learning what works and what doesn't. I learned most of these same techniques the hard way through many hours studying reference photos and trying to reverse-engineer my favorite starship.

So, the hard work has all been done for you. Now you get to have the fun.

Alan Sinclair
a.k.a. "Wizard of Flight"