



**MODEL**

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# ROCKET NEWS

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**NEWS**

**Feel  
the  
Force!**



**STAR  
WARS**™

# MESSAGES FROM LAUNCH CONTROL



Welcome!

Here's another exciting issue of the *Model Rocket News!*

I'm Matt Steele, the new editor of the *Model Rocket News*. I started flying model rockets in 1967 with an Estes Astron® Alpha. In the time since then, I have built and flown nearly every Estes kit ever offered.

I've participated in many forms of national and international competition winning a number of medals and national championships. Professionally, I have worked with the Army Pershing missiles and at Thiokol, where I was involved in a number of Navy missile programs. When the defense industry slowed down, I turned to the hobby market, running North Coast Rocketry®, and eventually ending up at Estes.

I have been a rocketeer since I was ten years old, and have lived, breathed, and eaten rockets since that time. I know how much fun you can have in model rocketry, since I've done nearly everything you can do in rocketry over the past 30 years. Hopefully, we'll show you how to have a fantastic time with model rocketry as well!

Keep 'em Flying!

# ESTES MEANS MUCH MORE THAN ROCKETS!

These days, Estes means a whole lot more than model rockets! In the past three years, Estes has expanded its product line to include nearly every type of flying model!

The growth started with the Light Gliders series. Easy to assemble, these airplanes gracefully soar across the sky, adding new dimensions to rubber band power!



Shortly after, the West Wings balsa scale glider series was released. These are balsa wood gliders scaled to resemble real military aircraft. Printed with authentic details and markings, the West Wings gliders are impressive in the air and on display. The catapult launched F-111 Aardvark and F-15 Eagle really zoom into the sky, just like the real things!



In 1995, the Sterling™ line of model airplanes and boats came into the Estes family. Sterling™ Models, a well known name for over 50 years, is a series of sophisticated free flight, control line and radio control airplanes, as well as model sail boats, racing boats, and warships. Designed for the true craftsman, Sterling™ Models offers a level of challenge seldom seen in the modeling world.



Not forgetting about rockets, Estes joined forces with North Coast Rocketry® to develop a new line of high impulse model rockets and motors for adult enthusiasts. These large rockets, up to 4" in diameter and over 5' tall, are powered by advanced F and G class motors. When you're ready for BIG rockets, North Coast Rocketry is ready to launch!



For over 50 years, Cox has filled the air with the sound of propellers and the fantasy of flight. Now, Estes and Cox have joined together! With the combination of aviation and aerospace expertise, Cox should soar into the next century. If you are intrigued by free flight, control line, or radio control airplanes, Cox has a model for you! Cox also boasts the legendary .049 engine, a mighty mini powerplant with which most model airplane fliers start.



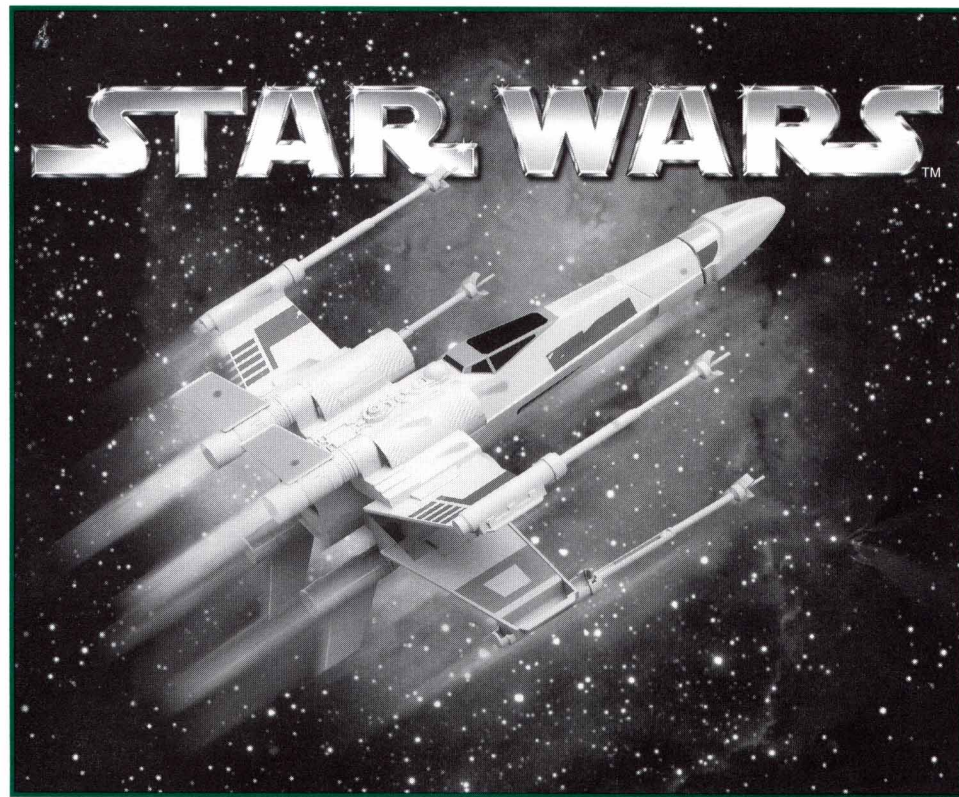
As you can see, it has been a busy time at Estes, as these product lines have been integrated into the operations in Colorado. Rest assured, our model rocket offerings will be better than ever (We hope our 1998 product offerings prove that!) and we're trying to expand our horizons even further!

## ESTES MODEL ROCKET NEWS

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The *Model Rocket News* is published twice annually and is available to Estes customers who have ordered at least \$30 worth of merchandise every year. Ordering assures that your name will remain on our active mailing list.

# STAR WARS™



Estes Industries proudly announces the release of a brand new set of *Star Wars* models! Brought to you by the world leader in model rocketry, the new Estes *Star Wars* models set new standards for detail and accuracy, as well as ease of construction. Each model has been faithfully scaled from the real movie models used by Lucasfilm™ for *Star Wars*, *The Empire Strikes Back*, and *Return of the Jedi*. The results are stunning.. you'll want to have each of these models, both for flight and as a collectable!

Blast-off with the Estes X-wing and join in the epic space adventure of *Star Wars*! Now you can fly an X-wing starfighter just like Luke Skywalker with the new X-wing starter set! The Estes X-wing flying model rocket is built to withstand the heat of battle and light speed. The kit comes with detailed injection molded plastic wings for easy assembly with magnificent detailing. The rocket can fly over 400 feet high and is recovered by a 12" parachute. Of particular interest is the inclusion of realistic "laser shots" and battle damage decals in the kit (For more tips on

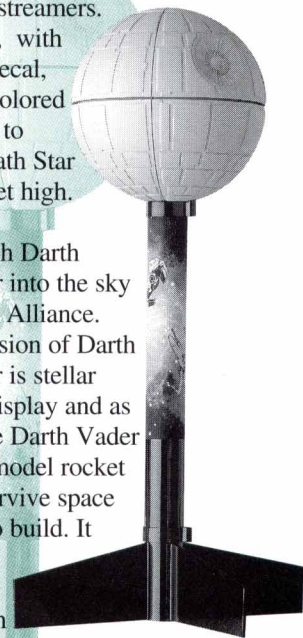


how to give your model the "action" look, consult the article on the following page.) As with all Estes kits, the X-wing can be launched again and again!

Travel back to Dagobah, when Artoo took to the sky after being expelled by the swamp serpent and launch your own R2-D2! The new 1997 Estes version of the R2-D2 flies through the air and returns to earth via a rear ejected parachute. The Estes R2-D2 flying model rocket is designed to be trouble free (unlike its movie counterpart) and a blast to fly over and over. The Estes R2-D2 comes with highly detailed plastic parts and self-stick decals. It can be built in a short amount of time and can reach altitudes over 250 feet!

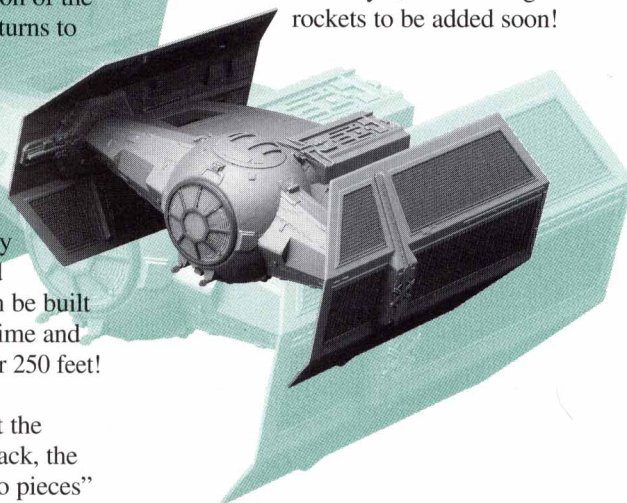
Just when you thought the Empire would strike back, the Death Star is "blown to pieces" in mid-air. The Estes Death Star flying model rocket kit is a safe, exciting, and interactive flying model that you'll enjoy launching many

times over! The Estes Death Star is designed to "burst apart in the sky" at peak altitude. The four Death Star remnants are safely recovered individually with bright, fluorescent orange streamers. The launch vehicle, with a cool body wrap decal, comes down on a colored 12" parachute. Fun to build, the Estes Death Star can fly over 250 feet high.



Now you can launch Darth Vader's TIE fighter into the sky and repel the Rebel Alliance. The 1997 Estes version of Darth Vader's TIE fighter is stellar looking both as a display and as a flying model. The Darth Vader TIE fighter flying model rocket is constructed to survive space battle and is easy to build. It comes with a removable flight probe and can reach altitudes of 250 feet. It is safely recovered with a brightly colored 18" parachute so that you can "battle" with it again and again. The detailed plastic parts are a snap to build and paint. You may even want to have a fleet of TIE fighters!

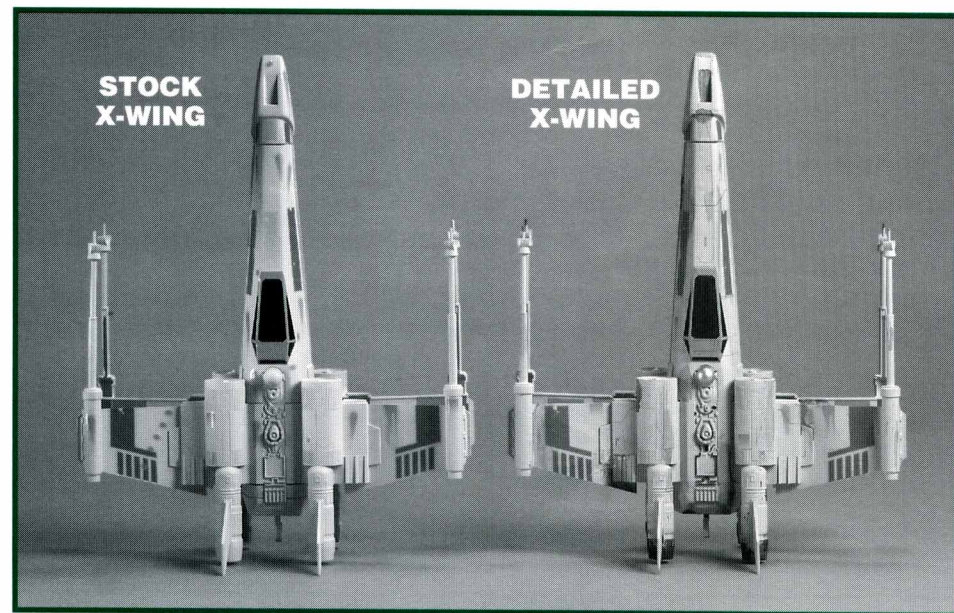
The models shown here are just the beginning of the Estes line. Look for the Star Destroyer, and Y-wing rockets to be added soon!



**ESTES MODEL**  
**ROCKET**  
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**NEWS**

# ULTRA-REALISTIC DETAILING FOR YOUR X-WING FIGHTER

BY MATT STEELE



As you've seen in the *Star Wars* movies, the fighters are not exactly pristine. They show signs of dirt, dust and deterioration. The trick is for you, the modeler, to replicate that look on your models.

There are a variety of techniques that you can use to achieve the battle worn look. Most plastic airplane and armor model builders are well versed in the subject, but it is unusual to apply such a treatment to rockets. The *Star Wars* models are an exception.

There are a few basics to consider. First of all, weathering effects will not hide poor workmanship, but rather exaggerate it, so take time and care in building your model. Also, consider that too much weathering can ruin a model. Work in stages, so that you can stop when you feel the effect has reached its peak. After all, there's no sense in spending so much time building the model, only to ruin it in the final steps!

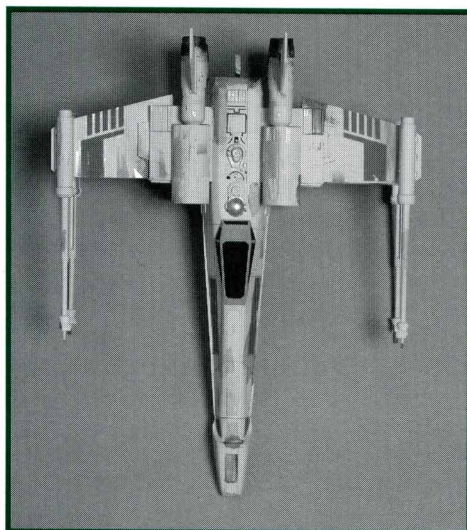
You may wish to use an airbrush at various steps of the application for better results.

## BUILDING THE MODEL:

Follow the stock kit instructions, up through, and including decal application. Allow any paint to dry at least 24 hours.

## CLEAR COAT THE MODEL:

Wipe the model with a tack rag to remove any dust. Spray the model with a clear coat at this stage to seal and protect the decals and the paint. Use a water based clear gloss acrylic for best results and ease of clean up. Be sure that the clear coat you use is compatible with your base layer of paint by testing it on a small, innocuous spot before committing the entire model, as some types of clear will wrinkle or bleed the base colors of paint. Apply several light coats rather than one thick one. This prevents the clear from running, and builds a good barrier. Allow the clear coat to dry for 24 hours.



## PANEL LINES AND DETAILING:

One of the most interesting ways to enhance your models is to add panel lines to simulate where various sheets of metal come together. There are a number of ways to accomplish this, but my two favorites are using dry transfers and/or using a marking pen or pencil.

Dry transfers work best on relatively flat surfaces. Usually, you can use black or gray lines (depending on the effect you wish to achieve) to simulate the panel lines. Most good hobby shops and graphic art stores will carry a wide variety of dry transfers that can represent lines, rivets, and even panels and hatches.

Carefully lay out each line on the model, rub the transfer briskly, and the line will appear on the model. If you don't like the position of the line, you can remove it by pressing a piece of tape to the transfer and lifting it off. Once you are satisfied with the location of all transfers, you can spray the model with another clear coat to seal the transfers in place.

If you want to enhance engraved lines on the model, a pencil, a permanent marking pen, or a technical pen (such as a Rapidograph) works well. These require a steady hand and a "do it right the first time" attitude, as mistakes are hard to repair. Usually, best results can be obtained by tracing the engraved lines with the pen. As with the dry transfers, cover the model with clear coat to seal the markings and prevent them from running or smearing.

## ADD A BLACK WASH

The best way to give your models that "used" look is to add a "black wash" that suggests oil, dirt, and general wear and tear to the models. The suggested wash is a thin mix of gloss black, white, dark gray, and thinner. The wash should be thin enough to flow quickly into the detailing, but not so thin as to have no effect at all. We suggest a ratio of three parts thinner to one part each black, white, and gray. Be aware that the mixture may thicken as you use it; be sure to keep it thin, as the whole idea is to simulate the flow of material on the airframe. Black wash the parts of the model with a fine tipped brush or a Q-tip. Let the