

**Build GREAT SCALE MODELS!** 

First, what is a scale model?

elcome to the world of scale modeling: At your request, this is the first of four letters we'll be e-mailing to you to introduce you to a great hobby.

If you've built models before, it may have been a while ago. In that case, you'll be surprised at all that has happened to the hobby while you were gone. And if you've never built a model before, don't worry we'll stick to the basics and start from the very beginning ...

## What is a scale model?

A scale model is a three-dimensional representation of a physical object. The model scale is most often expressed as a simple fraction: 1/24 scale means the model is 1/24 the size of the full-size subject. In other words, in 1/24 scale you would need 24 Chevy models parked bumper to bumper to equal the length of one Chevrolet. Like any fraction with 1 for a numerator, the greater the denominator the smaller the object.

Skipping past the carved artifacts of ancient history, scale model kits as we know them first appeared in England in the 1930s under the "FROG" brand (for "flies right off the ground.") As it happened, these rubber band-powered aircraft models



"Box scale" models were designed to fit packaging and shelf displays, rather than standardized scales. Revell's Lockheed Electra appeared in 1958 in 1/115 scale.

were manufactured in 1/72 scale (more on that in a moment).

A few years later, scale modeling took a serious turn as FROG and many others built aircraft recognition models for the war effort. Again, the scale was often 1/72 — a size that allows display and comparison of heavy bombers and diminutive fighter planes in a reasonable amount of space.

## Postwar boom

With peacetime came a greater availability and variety of plastics — and with that, new frontiers in model-kit manufacturing. Strombecker kits, which had been wood, began including plastic pieces. Notably, Airfix of England and Revell of the U.S. began producing plastic injection-molded kits.

your budget, your display space, and whatever

you yearn to build.

Early Revell kits were "box scale,"

designed to fit packaging and store-display plans. The first Revell model labeled "Authentic Kit" — meaning its details were designed to scale — was the World War II battleship USS Missouri, a motorized kit in 1/535 scale. In the same year (1953) came Revell's first aircraft kit, the F-94 Starfire in 1/56 scale. The scales of Revell models that followed were all over the map.

On the other hand, Airfix, following FROG's lead, produced aircraft in 1/72 scale. As the hobby rapidly grew in popularity, Airfix stuck to the same scales for most of its aircraft models: 1/72 for military aircraft, 1/144 for airliners.



Longtime FSM review modeler Larry Schramm built all these P-51 Mustangs. From front to back, the scales are: 1/144, 1/72, 1/48, 1/32, and 1/24. The smallest (1/144 scale) would be a little more than  $2\frac{1}{2}$ " long; the biggest (1/24scale), slightly more than 16".

# Which scale is right for you?

Consider scale before you choose a model. Some people like to stick to one scale so it's easy to see the relative size of the subjects. It is exciting to see how a Douglas DC-3 is dwarfed by a Boeing 747 and reflect on aviation in the 20th century. Others like to mix it up and build a variety of scales and subjects.

Your choice of scale depends on what you want to build, how you will display it, and how many and what sort of models you want in your collection. If you live in a house with enough space for a dedicated hobby lair, your choices are obviously different from a cozy apartment in midtown Manhattan.

Here are some of the things various scales offer:

Large scales (1/4 scale to 1/25 scale): This is, well, largely the domain of autos, motorcycles, and figures. One of these models can make an impressive desktop display; two or three of them and you'll be looking for a bigger desk. Most car models are in 1/24 or 1/25 scale, and several of them can fit nicely on a bookshelf. But a P-51 Mustang in 1/24 scale? With an 18½" wingspan, you'll soon need more shelves.

# **Constant scale**

**Model railroaders** were already used to choosing from a range of related products in the scale of their choice — their models have to be in the same scale to work together. But the plastic scale model industry took a few years to realize that modelers would value having several models in the same scale. Airfix continued with 1/72 scale aircraft and 1/76 armor models, while in the States, Monogram was an early leader in constant scale.

Eventually, standards have evolved and popular constant scales have been established. Here's an overview of scales and which models are most popular in what scales:

Popular modeling scales				
Scale	1" =	1 scale foot = (inches • decimals)	1 scale meter =	Prevalent models in this scale
1/4	4"	3" ● 3"	250 mm	Flying models, steam trains
1/8	8"	1 1⁄2" • 1.5"	125 mm	Die-cast cars, motorcycles, steam trains
1/12	ין	]" • ]"	83.3 mm	Cars, figures, motorcycles
1/16	1' 4"	<sup>3</sup> ∕4" ● .75"	62.5 mm	Cars, motorcycles, armor
1/20	1' 8"	<sup>19</sup> ⁄32" • .6"	50 mm	Cars
1/22.5	1' 10 <sup>1</sup> ⁄2"	<sup>17</sup> / <sub>32</sub> " • .53"	44.4 mm	G scale trains
1/24	2'	1⁄2" • .5"	41.7 mm	Cars, trucks, large-scale planes
1/25	2' 1"	<sup>15</sup> ⁄32" • .48"	40 mm	Cars, trucks
1/32	2' 8"	<sup>3</sup> ⁄8" • .375"	31.25 mm	Aircraft, boats, cars, figures, No. 1 scale trains
1/35	2' 11"	11/32" • .343"	28.57 mm	Armor, boats, figures, diorama structures
1/43	3' 7"	%32" <b>●</b> .279"	23.25 mm	White-metal cars and trucks
1/48	4'	1⁄4" • .25"	20.83 mm	Aircraft, armor, cars and trucks, O scale trains
1/64	5' 4"	<sup>3</sup> ⁄16" • .187"	15.62 mm	Aircraft, S scale trains
1/72	6'	<sup>11</sup> ⁄64" • .167"	13.88 mm	Aircraft, armor, boats
1/76	6' 4"	<sup>5</sup> ⁄32" • .158"	13.16 mm	Armor, OO scale trains
1/87	7' 3"	%4" ● ".138	11.49 mm	Armor, HO scale trains
1/96	8'	<sup>1</sup> ⁄8" • .125"	10.42 mm	1/8" scale ships, aircraft
1/100	8' 4"	— • .120"	10 mm	Aircraft
1/125	10' 5"	— • .096"	8 mm	Aircraft
1/144	12'	— • .083"	6.94 mm	Aircraft, ships
1/160	13' 4"	— • .075"	6.25 mm	N scale trains
1/192	16'	<sup>1</sup> ⁄16" • .062"	5.21 mm	1/16" scale ships
1/200	16' 8"	— ● .06"	5 mm	Aircraft, ships
1/220	18' 4"	— • .054"	4.54 mm	Z scale trains
1/350	29' 2"	<sup>1</sup> ⁄32" • .034"	2.86 mm	Ships
1/700	58' 4"	<sup>1</sup> ⁄64" • .017"	1.43 mm	Ships
1/720	60'	— ● .016"	1.38 mm	Ships



Transports were not the biggest ships in the U.S. Navy during WWII, but a 1/35 scale troop ship is a humongous undertaking. In that scale, master modeler Lewis Pruneau built this scene with landing craft and more than 200 figures — but only a section of the ship. "Otherwise," he says, "that thing would have been 17' long!" Still, it is about 2' tall.

Many figure modelers enjoy large scales (1/8 or 1/12) for the opportunities they present to give the figure authentic and accurate details such as bootlaces, equipment webbing, etc.

Midrange (1/32 to 1/48 scale): Traditionally, many military miniature figures have been sculpted in 1/32 scale (also referred to as 54mm). These are often used with 1/35 scale military vehicles, which are close enough to match up. And 1/35 scale is the most popular for armored fighting vehicles (tanks, halftracks, self-propelled guns, etc.)

Recently, 1/32 scale aircraft have been increasing in popularity. Again, this is a great detailing opportunity — but you need a lot of space. A B-17 Flying Fortress in 1/32 scale has a 40" wingspan!

On the other hand, 1/48 scale is popular for WWII aircraft, especially fighters large enough to build detail in the cockpit, but small enough to collect quite a few before ordering that next bookcase.

Small scales (1/72 to 1/200 scale): A lot of

aircraft modelers like 1/72 scale for the variety that can be practically collected some bombers and jumbo jets can get a bit unwieldy, but fighter planes fit in the palm of your hand. If you're familiar with HO scale railroads (1/87 scale), you know just how small vehicles can be. Adding a lot of detail may require magnifying glasses. In fact, many armor modelers enjoy the challenge of building in 1/76 scale, where assembling tank treads and road wheels requires a jeweler's touch.

Compared to WWII warbirds, modern jetliners are massive enough to rate 1/144 scale. This is the most popular scale for airliners, although some are made in 1/200 scale as well.

### Ships, not boats (1/200 to 1/700 scale): A

rule of thumb: The difference between a boat and a ship is that a boat can be put aboard a ship. However, a ship cannot be placed on a boat. Thus, while submarines and PT boats may appear in 1/72 and even 1/35 scale, most ships are in smaller scales. Even in 1/200 scale a battleship will take the lion's share of

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most kitchen tables, as will a 1/350 scale aircraft carrier. But 1/350 scale is the most popular ship scale, yielding shelf-friendly destroyers and cruisers. And, like 1/76 scale armor, 1/700 scale ships offer the challenge of micromodeling. In that scale, unassembled antiaircraft guns look like iron filings.

So, which scale is right for you? The answer is easy: The one you want. In addition to display/storage space, consider what you desire in your hobby. Will you spend weeks, months, perhaps even years on a single model? Or do you want something that will go together more quickly and easily? Do as you like — it's your hobby. Enjoy!

### Next time is tool time

As you choose your model and prepare to build, we'll show you the basic tools you'll need. Fear not: It's not a lot. Many topnotch modelers began their career with a TV tray or a kitchen table for a workbench, and many of them don't use many more tools now than they did then. You can do this — and have fun!



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