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In these strange times I am certain that readership of the many online model making forums has greatly increased. This in itself is an important illustration of the impact of newer technologies on our approaches to the craft. In some ways these forums have become highly important distributors of information and techniques. Nevertheless, they do display the limitations of this source for such materials, since, by and large, the distribution of information is virtually entirely random, and very few have really effective functions allowing detailed searches for that one piece of information or the critical technique one noticed some time ago and now would solve one's immediate problem.

One noticeable trend within the posts appearing on these forums is an increasing interest in the application of newer technologies to traditional model making processes. For example, builders are pushing the envelope of what can be accomplished using photo-etching, going well beyond the multitude of commercially available items by creating their own sophisticated multi-layer artwork (often if not always using computer design programs) and then either etching the parts themselves or taking advantage of commercial etchers offering production for relatively low costs. Professional model makers have done this for quite some time but it is only relatively recently that avocational builders have adopted these practices.

Another very prominent technology is the use of three-dimensional (3D) printing to produce highly detailed components at home. This is driven by falling prices for the equipment itself and the emergence of small, quite inexpensive machines that are capable of using resin rather than other plastics or nylons, thus allowing production of small, very detailed parts that do not feature the 'terraced' effect more common in the past. Again, builders are developing their own designs, always using computer drawing programs, and then either buying and using the

equipment themselves or sending out the designs for manufacture by commercial operators.

A third technique, which is really several separate technologies, is the use of computer controlled cutting equipment to generate parts for models. Relatively inexpensive CNC routing set-ups, laser cutters, or cutting equipment that relies on blades use computer generated designs to produce very accurate components from flat materials for building models of all types. More often than not, these parts tend to be the larger elements of a model, but some of these machines are capable of producing quite small detail components.

All of these technologies rely on another important phenomenon, the emergence of cheap (often free), quite sophisticated, relatively intuitive computer design programs. The main obstacles to amateur use of this technology have been the complexity of the programs and their price tags, putting them beyond either the pockets or the computer sophistication of many. It would be an exaggeration to suggest they are utterly simple, but many do not require an extensive background or a lot of training to learn how to use them. Furthermore, most interface effectively with the operating systems of the other technologies.

One could argue that using these technologies is not 'real model making' but I am sure that the same complaint has been raised by craftsmen about new tools ever since the introduction of small bandsaws in the middle 1600s, if not before.

— Paul E. Fontenoy