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FOR IMMEDIATE RELEASE

Wargames Factory Shows How David Can Tackle Goliath Using SensAble's FreeForm 3D Modeling System

*Streamlined All-Digital Workflow Lets Company Deliver High-Quality Historical Figurines
Yet Maintain Small Staff, Reduce Production Costs*

WOBURN, MA – October 21, 2008 -- [SensAble Technologies, Inc](#)®, a leading provider of 3D modeling solutions and haptic devices, announced that its customer, Wargames Factory, maker of highly detailed miniature figures for wargamers and collectors, has used SensAble's [FreeForm® 3D modeling system](#) to create two new figure sets, debuting today, with time- and cost-savings that typify the competitive edge available from today's all-digital processes.

Using the FreeForm® 3D Modeling System as the centerpiece of its product design and prep for manufacturing process, Wargames Factory shaved 40 percent -- more than a month -- off the time needed to create and produce its "Caesar's Legions" (Late Republican Romans) and "British Zulu War Infantry" figure sets. The company lowered the cost of creating the manufacturing molds for multi-part figurines by nearly 20 percent, while achieving greater precision with the modeled figures.

Wargames Factory, which is based outside Boston, has just 6 employees and embraces a variety of innovative business practices such as using recycled plastics in its miniatures, employing people with disabilities for production through a partnership with Triangle, Inc, and streamlined design-for-manufacturability techniques. Founder Tony Reidy launched Wargames Factory a year ago with a huge passion for historical gaming, a vision for improved design and manufacturing processes – but only a small amount of investment capital.

To reach the estimated 4 million hobbyists worldwide with a zeal for constructing and painting 28mm miniatures and recreating historic battles with their friends, Reidy realized he needed exceptional detail in the costumes, poses, and facial expressions of his miniatures – producing them at smaller volumes than larger firms, and yet still meeting price points starting as low as \$14.95 per set.

“Despite the talk about all-digital manufacturing, an amazing amount of the plastic-injection molding business still uses labor-intensive, manual processes,” Reidy said. “It is very much an art more than a science.” Many toys and models are still hand sculpted in wax or clay with injection tools made using a pantography process where the parts are traced over to produce a scaled version prior to cavities being cut into the steel (a stage where many manual processes are needed to create the final mold.) This traditional process can take up to 20 or more weeks from

start to finish for highly detailed parts such as those created by Wargames Factory. Even when executed by experienced workers, pantography can lead to areas of lost detail on parts and manufacturing problems that can halt production.

To achieve the goals of the business plan, Wargames Factory knew that the ability to quickly produce new box sets would be key -- and would only be possible through all-digital efficiencies.

“After looking at many alternatives, we determined that FreeForm was the only software available that would allow us to design our miniatures for precision injection mold tooling and manufacturing – letting us create highly intricate sculptures that preserve their detail, in record time,” stated Reidy. “In addition to saving time and costs, FreeForm allowed us to have confidence in the parts that we deliver for tool design. The beauty of FreeForm is that we know that what we put into the digital process is exactly what we'll get out of the final mold.”

FreeForm is used by product designers in many fields because it is tailored for creating curved, organic and non-geometric shapes, such as collectible figurines. Instead of working with a computer mouse, FreeForm users hold a stylus-like PHANTOM® haptic device, and literally sculpt by touch – actually “feeling” the figurine’s surface as they are designing on-screen – just as they would if they were working with wax or resin.

FreeForm further streamlines manufacturing with features that support:

- Visualizing undercuts – showing the product designer where potential manufacturing problems may exist – and fixing them at the touch of a button
- “Shelling” or hollowing out any design in seconds – without fail
- Defining the mold’s parting lines – where the mold will open after the plastic has hardened--especially irregular parting lines on complex shapes
- Scaling up or down to a different size model of a figurine at the press a button

“We’re already preparing to ship our next four box sets in a few weeks – another accomplishment due to FreeForm,” Reidy continued. “Now that we have standardized on FreeForm, we can literally go from concept to final plastic parts in a matter of weeks. We can also support multiple design and production processes at the same time without missing a beat. For example, FreeForm allows us to utilize the work of other digital sculptors and “fix” their parts for manufacturing. FreeForm has proven to be everything we hoped it would be – and more.”

“Wargames Factory’s approach typifies the ways that small, nimble manufacturers can effectively compete against global firms which have more employees, massive technology investments and costly overhead,” said Joan Lockhart, SensAble’s vice president of sales and marketing. “By adopting an all digital workflow from design through manufacturing, entrepreneurial companies like Tony’s are able to streamline the entire process and get high-quality products to market faster. Wargames Factory’s business model is a real success story, and SensAble is proud that the company made our FreeForm technology the cornerstone of its design and production processes.”

About Wargames Factory

Wargames Factory is a new company that designs and manufactures high-quality hard plastic multi-part miniatures in 28mm (1/56 scale) for wargamers, painters, modelers, and collectors. Based outside Boston, Massachusetts, Wargames Factory uses recycled plastic and partners with Triangle (www.triangle-inc.org) a non-profit organization that serves thousands of people with disabilities and employs over 200 “people with ability”. Find us at www.wargamesfactory.com.

About SensAble Technologies

Founded in 1993, SensAble Technologies is a leading developer of 3D touch-enabled (force feedback) solutions and technology that allow users to not only see and hear an on-screen computer application, but to actually ‘feel’ it. With 33 patents granted and over 6,000 systems installed worldwide, SensAble Technologies' haptic technology is being used in applications ranging from designing toys and footwear, to surgical simulation and stroke rehabilitation, to dental restorations, as well as a range of research and robotic applications. The company markets its own 3D modeling solutions as well as its haptic devices and developer toolkits to medical, dental, design, and manufacturing companies; educational and research institutions; and OEMs. SensAble products are available through direct and reseller channels worldwide. www.sensable.com.

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