



# ANTI GRAVITY<sup>®</sup>

Redefining the entertainment industry through innovation.

by Joseph P. Agabiti

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ou want to do something different – something new, something that’s never been done before – and you can’t find a product that meets your needs in any store because it doesn’t exist. What do you do? You invent something new. Inventing something new is exactly what AntiGravity, New York’s only aerial production company, has done. They are redefining the entertainment industry with their cutting edge performances.

Aerial acrobatics, pogo stick shoes, bungee cords, rappelling from the rafters on white silk – all are in the AntiGravity bag of tricks. AntiGravity is a troupe of performers founded by Christopher Harrison. This unique style of performance comes from Harrison’s desire to combine his love of gymnastics with his love of dance. The result is an amazing demonstration of acrobatic skills that seamlessly merges athletics and aesthetics into a new movement. “We’ve developed our own vocabulary, kind of a sports-acrobatics vocabulary,” says Harrison.

childhood dream gained national recognition. The AntiGravity troupe performed nightly at the medals ceremonies and was asked to perform the finale at the closing ceremonies.

While at the Olympics in Salt Lake City, the troupe also performed its show, “An American Band,” at a local club, Harry O’s. The “An American Band” performance was the troupe’s response to the events of September 11th. AntiGravity was on its way from New York to Miami on the morning of the attack and developed this show as a personal



## Redefining the entertainment industry through innovation.

The story of AntiGravity began with a dream. At an early age, Christopher Harrison had a dream to go the Olympics as a gymnast. He won awards for gymnastics in his teens and used his gymnastics skills as a cheerleader in college. Harrison attended the University of Utah to study theater and dance. While attending college he managed to blow out his knee during a cheerleading competition. This accident almost ruined his other dream – to become a dancer on Broadway. After extensive rehab, he auditioned for and was cast in *A Chorus Line*, among other Broadway shows.

It was Christopher Harrison’s notion to incorporate gymnastics with dance performance that spawned AntiGravity. At the 2002 winter Olympics in Salt Lake City, Harrison’s

response to the events of that day. Before the Olympics, AntiGravity’s first critically acclaimed full-length New York theatrical production, *Crash Test Dummies*, was performed at the New Victory Theater on 42nd Street. Written and directed by Harrison, it featured the athletes of AntiGravity as crash test dummies. The set for the show featured a large crate labeled “New Product” which was filled with, what seemed to be, an endless supply of items, such as pogo stick shoes and bungee cords, that the “dummies” experimented with to the delight of the audience.

The troupe has become famous for its high flying daredevil aerial stunts, but that was not always the case. For the first several years, the AntiGravity performers used gymnastic



several years, the AntiGravity performers used gymnastic skill and muscle alone to defy gravity. Then, they began to look at what they were doing and wondered if there was an easier way. The easier way came from the troupe's adaptation of pogo sticks, stilts and bungee cords.

Imagine someone jumping on a trampoline. Now, add stilts the image of the person on the trampoline. Finally, remove the trampoline from the image, but the person is still jumping as if he were on one. Can you imagine it? Well you don't have to because that is exactly what a person wearing AntiGravity Jumping Boots looks like. It is a spectacular sight because the AntiGravity performers are all world class gymnasts in top-notch physical shape. They don't just jump! They run, dance, flip, fly and perform other assorted aerial feats when they wear AntiGravity Jumping Boots.

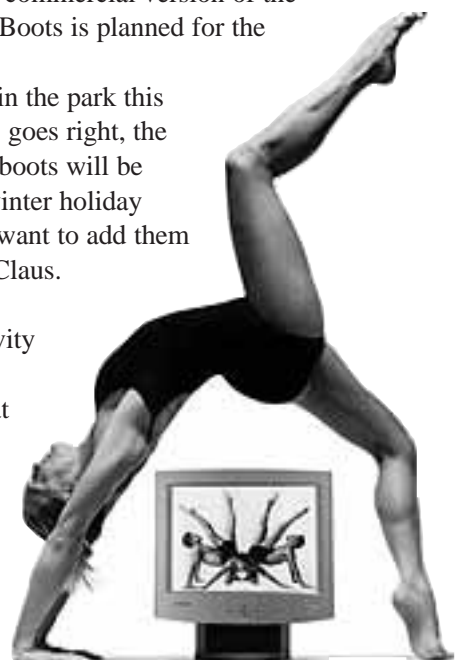
The troupe used innovation and imagination to create their new tools. The development and use of the AntiGravity Jumping boots is a classic example of the use of technology to enhance human ability. What is technology? If technology is defined as "the process of using resources and knowledge to create products or services to satisfy a want or need," then the AntiGravity Jumping Boots meet the definition. The team

at AntiGravity wanted to jump higher and fly farther in their performances, so they looked at existing resources – stilts and pogo sticks – and combined them with their knowledge of how the human body moves to create the AntiGravity Jumping Boots.

The design process includes modeling, testing, and then redesigning, if required, to meet the required need. The team at AntiGravity is using this process because the AntiGravity Jumping Boots continue to evolve as the team redesigns them to make improvements. Does jumping in a pair of AntiGravity Jumping Boots sound like fun to you?

Well you're in luck; a commercial version of the AntiGravity Jumping Boots is planned for the near future, but don't expect to be jumping in the park this summer. If everything goes right, the AntiGravity Jumping boots will be available before the winter holiday season, so you might want to add them to your list for Santa Claus.

Although an AntiGravity show can seem to be random and somewhat chaotic at times, the moves are actually carefully choreographed. Christopher Harrison artfully combines gymnastics and



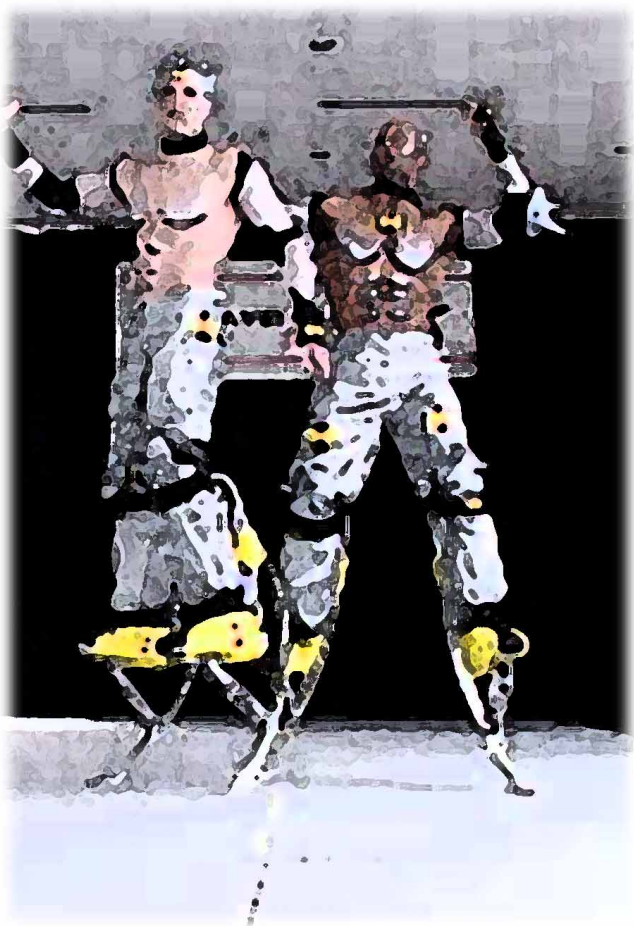
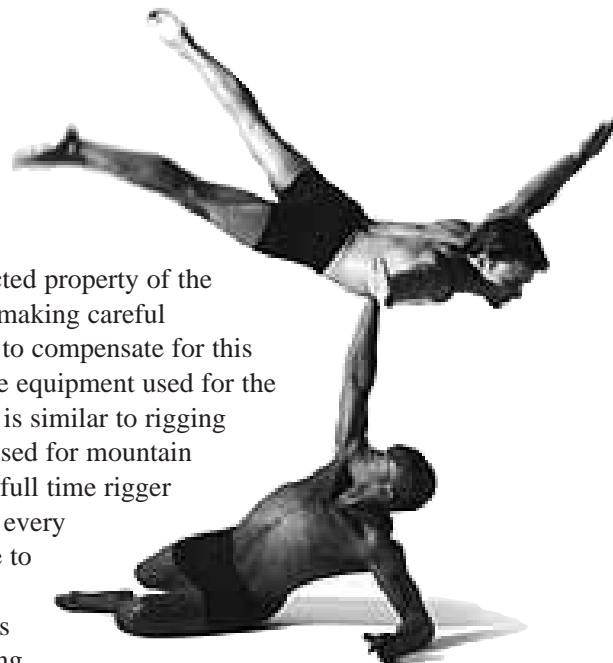
safety and well being of the performers is paramount to the members of the AntiGravity troupe, so they turn to technology yet again to find answers.

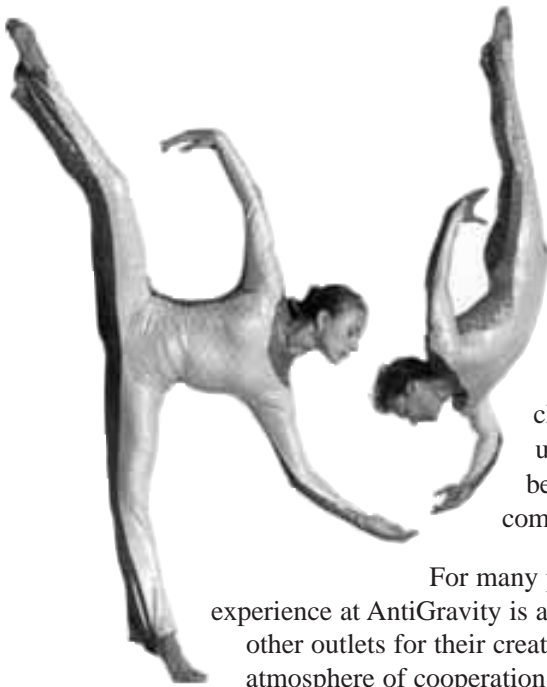
Behind the scenes of an AntiGravity show is careful planning and Computer Aided Design. Members of the AntiGravity team actually create a cyber version of the stage on which they will be performing. They use the computer drawings to make detailed calculations about the length of bungee cords and other props and gear they will use in relation to the space available. In addition, the team must always be ready to handle the unexpected. Recently, they were confronted with the effects a change in temperature has on the bungee cords they use. They discovered that the bungee cords become more elastic when the temperature rises; the more elastic the cords become, the farther they will stretch; and if they stretch too far, the performer's safety is compromised. The experienced personnel at AntiGravity were able to deal with

this unexpected property of the material by making careful calculations to compensate for this variable. The equipment used for the aerial stunts is similar to rigging equipment used for mountain climbing. A full time rigger is present at every performance to test the bungee cords and rappelling equipment used. Just like the Jumping Boots, don't expect to find the equipment used in an AntiGravity performance at a local store.

Again, the design team combined their vast knowledge and used innovation to make improvements to certain equipment to meet their needs. In this case, they combined knowledge and equipment from extreme sports with the knowledge from traditional theatric productions to enhance and make their own style of aerial entertainment.

Brenden O'Neil, now a performer with Antigravity, said that for him, gymnastics started out as a recreational activity, spending about 3 hours a week when he was 5 years old. by the time he reached high school and throughout college, he was spending 6 hours a day, 6 days a week in the gym. Brenden's experience is similar to the training that many gymnasts experience. The sport of gymnastics is highly competitive, and only a few gymnasts continue in the sport after college. Harrison wanted to create a company that would be an outlet for the creative talents of athletes like Brenden. He





certainly succeeded with Antigravity, as it enables world class gymnasts to utilize their talents beyond their competitive careers.

For many performers, their experience at AntiGravity is a stepping stone to other outlets for their creative talents. An atmosphere of cooperation exists at Anti-Gravity; when something needs to get done, it is not hard to find someone from the troupe willing to do it. While working at AntiGravity the performers are encouraged to develop and strengthen their skills so they can move on to other jobs in the entertainment industry.

The diversity of those skills is an important element in the success of the company. One person might have an accounting background, another might have done web design in college, and still another may be a business whiz. Harrison uses these other skills in managing the “business” end of the entertainment company.

As a job, working at AntiGravity is rewarding for the performers in more ways than one. While they have gymnastic and dance experience in common, their other skills are not ignored.

The AntiGravity enterprise is growing; besides the performance troupe, AntiGravity Inc. includes the AntiGravity Boots division, a talent management wing, and a rigging subsidiary in addition to their midtown studios with a housing complex for visiting artists. With all the working that Harrison’s company is involved in, it’s hard to imagine he could do any more, but he does. Over the years he has been actively involved in the community and has established several outreach programs to promote fitness and teach acrobatics and performance techniques to inner city youth and the disabled.

An AntiGravity performance is something to see! If you have the opportunity, I highly recommend it because it will be a worthwhile experience. If you do get the chance, enjoy the show; but take a closer look, and be amazed by the innovative style this High Tech/High Flying troupe uses as it redefines our concept of what entertainment is and should be. If you’re interested in taking a closer look at them right now, visit the AntiGravity website at [www.anti-gravity.com](http://www.anti-gravity.com). ●

## Design Brief Design Brief

- Use the Antigravity Jumping Boots as an example of taking an existing product and redesigning it to be used for something else. Challenge your students with a design problem of modifying an existing product to do something it was not original designed for. Or challenge your students with a desired outcome and see what products they would modify to meet the outcome.
- The elastic property of a bungee cord is affected by changes in temperature. Have students design, model, and test a storage container that is resistant to changes in temperature that could be used to store bungee cords.

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