Florida's Bungee Jumping Regulations: Why Other States Should Take the Plunge

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by
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“It takes no skill, lasts less than a minute and you can brag to your friends how terrific you were.” Jim Mullen, Entertainment Weekly columnist, explaining bungee jumping’s popularity.¹

**Introduction**

Since its inception in the United States, bungee jumping’s thrill has lured hundreds of thousands of participants.² As the bungee jumping industry has experienced this enormous growth,³ states have scampered to regulate⁴ a new recreational activity in which there are strong interests at stake⁵ and little existing legislative or judicial guidance.

For the most part, states initially took a cautious approach to regulating bungee jumping, choosing either not to regulate the activity at all,⁶ or to treat bungee jumping under existing amusement ride regulations. In an activity with a very small margin for error and thousands of new jumpers each week,⁷ it was inevitable that serious injuries or fatalities would occur. After two people in North America died from bungee jumping-related accidents in the summer of 1992,⁸ some states began to wield a heavier regulatory hand than they had previously.⁹ Three states temporarily banned the activity altogether.¹⁰

A wide range of state regulatory approaches emerged.¹¹ States that depended heavily on tourism were particularly affected by the bungee phenomenon. Those states scrambled to discern both the relevant legal issues and the proper approach to the regulation of bungee jumping.¹² Perhaps the more recent bungee-related deaths in the

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¹. They Wrote It, SPORTS ILLUSTRATED, Jan. 11, 1993, at 7.
². The North American Bungee Association (NABA) estimated that the total number of jumps made in the United States would reach 1,000,000 by the end of the summer of 1992. Josephine Marcotty, Boing . . . Boing: Bungee Jumping Growing Faster Than the Controls, STAR TRIBUNE (Minneapolis-St. Paul), Aug. 2, 1992, at 1A.
³. See infra note 24.
⁴. See infra notes 30-37 and accompanying text.
⁵. See infra part I.B.3.
⁶. See infra note 29 and accompanying text.
⁷. At the peak of the bungee craze in the summer of 1992, an estimated 55,000 Americans jumped each week. Kellie Hudson, Why? Bungee Jumpers Say They Do It For the Feeling of Sheer Terror, TORONTO STAR, Aug. 8, 1992, at A2.
⁸. See infra note 28.
⁹. See infra note 30.
¹⁰. See infra note 31.
¹¹. See infra notes 29-37, 63-64 and accompanying text.
¹². See infra notes 31-36 and accompanying text.
summer of 1993\textsuperscript{13} will convince all of the states to carefully consider the issues involved in regulating bungee jumping.

This Note examines why regulation of bungee jumping operations is imperative to protect the various interests at stake in the activity. It advocates a regulatory approach that is consistent among the states, so that, regardless of location, diverse interests will receive equal degrees of protection. Rather than awaiting the development of case law in the area, with the likelihood of inconsistent adjudication, this Note recommends that states take a proactive stance. They can do this by adopting an approach similar to Florida's regulatory scheme, which enhances existing amusement ride regulations by adding rules specific to bungee jumping. This Note further addresses possible improvements to the regulations adopted in Florida, with particular emphasis on ensuring that bungee jump personnel receive sufficient training.

Part I provides an overview of the evolution of bungee jumping in the United States and details some of the problems that arose in connection with its regulation. It considers the various interests implicated in the activity and the basis on which the government may intervene to regulate commercial bungee jump sites. Part I concludes by examining the inadequacies of the erratic system of regulation that currently exists.

Part II discusses the two most extreme regulatory options available to states—no regulation and a total ban—and concludes that neither of those options adequately protects the interests involved.

Part III explores the regulation of bungee jumping under existing rules aimed at amusement rides. This section explains how such regulations nearly succeed in achieving the major goals of preventing injuries and ensuring that liability rests appropriately and predictably when injuries occur. It briefly addresses how courts have typically interpreted negligence principles in the context of accidental amusement ride injuries.

Part IV examines an activity closely analogous to the current bungee craze: the trampoline fad of the 1950s and 1960s. This section notes the similarities between the evolution of the two activities and highlights the lessons to be learned from the "trampoline park" experience.

Part V examines how the state of Florida has pioneered a new approach to bungee regulation, by bringing bungee jumping under the "umbrella" of its amusement ride rules and enacting additional regulations aimed specifically at bungee jumping. It guides the reader

\footnotesize{13. \textit{See infra} note 38.}
through an imaginary bungee jump under Florida’s new regulations. It discusses the degree of protection afforded the various interests by the regulations and recommends improvements to the Florida approach. Finally, it proposes that other states use the Florida framework as a starting point for adopting a consistent approach to bungee jumping regulation.

I

Bungee Jumping in the United States

A. Background

Bungee jumping is a recreational activity in which a person plummets from a bridge, building, hot air balloon, or platform (attached to a stationary tower or to a mobile crane) up to 200 feet in height, with a series of elastic cords fastened to either the waist or the ankle, that cause the jumper to rebound upward instead of landing below. The jumper bounces a few times after the initial plunge before being lowered to the ground and disconnected from the bungee cords.

The appeal of bungee jumping is in the inherent risk: the participant’s opportunity to defy death by jumping from a height as great as a tall building and then to be able to walk away from the experience. Jumpers rave afterwards about the huge adrenaline rush brought on by the bungee jump.

Bungee jumping has its origins in a 1500-year-old rite of passage into manhood practiced on the South Pacific island of Pentecôte.


During the summer of 1992, about 80% of all bungee jumping in the United States was done from construction cranes, since all but two states had banned jumping from public bridges and jumping from hot air balloons had become less popular. Marcotty, supra note 2; Angus Phillips, At the End of My Rope Over Bungee Jumping, WASH. POST, July 21, 1992, at E3.

15. The recoil, known to bungee aficionados as the “boing,” is considered to be the best part of the ride because of the sense of weightlessness following the exhilaration of the initial plunge. Marcotty, supra note 2.

16. “[A]ll who try it exult at one of the most primal of accomplishments—conquering fear.” Id.

17. According to one bungee jumper, “You feel like you’re going to die and the body senses that and you end up with a huge rush of adrenaline to cope with it.” Robin D. Givhan, The Thrill of the Fall: A Dose of “Brain’s Own Morphine?”, S.F. CHRON., July 24, 1992, at E3.

William Ganong, a University of California at San Francisco physiology professor, explained that “the feeling of pleasure might come from a flood of endorphins, ‘the brain’s own morphine.’” Id.

18. Marcotty, supra note 2.
this ritual, "land divers" build towers up to eighty feet tall from bush timber and vines.\textsuperscript{19} With short, springy vines attached to the tower and to their ankles, they dive headfirst, plummeting to within inches of the ground before the vines break their falls.\textsuperscript{20}

The modern sport is traced to England, where formally attired members of Oxford's Dangerous Sports Club jumped from a Bristol bridge in 1979.\textsuperscript{21} The activity entered the U.S. commercial sports scene in 1987.\textsuperscript{22} As it gained exposure among U.S. daredevils, and liability insurance for the jump site owners became widely available in 1991,\textsuperscript{23} bungee jumping quickly developed into a highly publicized commercial activity.\textsuperscript{24} Many operators set up jump sites in parking lots, on fairgrounds, at rock concerts, and on beaches, using mobile cranes as "launch pads."\textsuperscript{25}

The remarkable growth in the popularity of bungee jumping, combined with the fact that many operators were using mobile cranes designed to lift inanimate objects, not people,\textsuperscript{26} increased the possibility that something would go wrong. Until the summer of 1992, the industry enjoyed an exceptional safety record in North America,\textsuperscript{27} but

\begin{footnotes}
20. Id.
22. Two brothers from Mountain View, California, deserve much of the credit for bungee jumping's initial surge of popularity in the United States. John and Peter Kockelmann started a small commercial operation in 1987, jumping from secluded bridges in the Sierra Nevada mountains. With bungee jumping still a largely clandestine activity, the Kockelmans' business grew by word of mouth. When police interference put a damper on bridge jumping, the brothers switched to hot air balloons and cranes. Mark Folk, \textit{At the End of A Rope, Daredevils Jumping at Chance to Fly}, \textit{USA Today}, Aug. 3, 1992, at B1.
23. Former NABA president Greg Glassock attributed the 1991 explosion in popularity to the availability of liability insurance. Givhan, supra note 17.
24. The number of operators grew from about 30 to 250 in just one year. An average company could expect 800 jumpers per month, paying $60 to $100 per jump. In all, the bungee industry was expected to take in about $40 million a year. Folk, supra note 22.
25. These mobile operators sometimes maneuvered jumpers up the crane and back down within five minutes on busy days, relying on speed for increased revenue. Id.
27. There had been only one fatal bungee jumping accident in the United States. In October 1991, 29-year-old Hal Irish, a bungee-jumping instructor, fell 70 feet to his death after jumping from a tethered hot air balloon near Perris, California. \textit{Bungee-Jump Death}
then tragedy struck three times within a few weeks, leaving two
jumpers dead and two seriously injured. Then, tragedy struck three times within a few weeks, leaving two jumpers dead and two seriously injured. 28

Before the serious accidents in 1992, many states had taken a very limited approach to regulating bungee jumping. With the awareness that the activity could be deadly, came the recognition that immediate government intervention was needed to ensure public safety. 30 Three states quickly issued temporary bans on the sport. 31

Sparks Call for Ban, ATLANTA J. & CONST., Oct. 29, 1991, at D9. The accident happened when Irish's cord became detached from his harness. Id.

28. On July 9, 1992, an accident near Bay City, Michigan, resulted in the death of 28-year-old jump master Joel Gentry and critical injury to an employee who had just completed a jump. After the employee jumped, the crane operator apparently raised the basket, which still contained jump master Gentry, beyond the proper stopping point, causing it to strike the boom of the crane. The impact either broke or detached the cable that secured the basket to the crane. The basket crashed to the ground, killing Gentry and critically injuring the man on the ground. No Jumpin' Off My Crane, ENGINEERING NEWS REC., Aug. 17, 1992, at 16.

The second fatality happened on August 1, 1992 at Peterborough, Canada. There, 19-year-old Troy Hurtibise fell 170 feet during a test jump, after he failed to attach his bungee cord to the main support cable on the crane. On reaching the ground, he missed the air bag. On the Job: One Month's Tragic Roll Call, TORONTO STAR, Nov. 21, 1992, at D5.

The second serious injury of 1992 occurred in New Jersey when a Delaware nurse broke her spinal cord landing on a protective air bag, after jumping with a bungee cord that was too long for her weight. Frances Ann Burns, New Jersey Mulling Bungee Ban, UPI, Nov. 9, 1992, available in LEXIS, Nexis Library, UPI File.

29. As of October 1991, authorities acknowledged that there were virtually no regulations to protect consumers taking part in the fledgling sport. Bungee-Jump Death Sparks Call for Ban, supra note 27. Some states continued to ignore the need for regulation. For example, as late as July 1992, the state of Idaho had virtually no requirements for jump sites. Margaret Miller, Leap of Faith—Bungee Jumping a "Nightmare" for State Regulators, Inspectors, SEATTLE TIMES, July 28, 1992, at A1. According to NABA, about 25 states had virtually no regulations directed at bungee jumping as late as August 1992. Frank Bentayou, Drawing the Line on Thrills, USA TODAY, Aug. 30, 1992, at 10. Of the remaining states, many had regulatory controls similar to those for carnival rides. Id. A notable exception was Georgia's bungee regulation, effective January 30, 1992, which contains comprehensive standards regarding bungee sites and equipment. GA. COMP. R. & REGS. r. 300-8-3-.01 to -.21 (1993).

The state of Florida, long dependent on tourism as its major industry,\(^{32}\) was particularly proactive in dealing with the situation. Following its initial imposition of a temporary ban on the activity,\(^{33}\) the state held a public hearing to decide whether to continue the ban or to retract it while new safety regulations were considered.\(^{34}\) At the hearing, the state took testimony from bungee operators, heavy equipment manufacturers, and safety experts.\(^{35}\) A week later, bungee operations were allowed to reopen subject to strict interim regulations.\(^{36}\)

In the wake of the tragic accidents in 1992, other states also acted promptly to review and refine their approaches to bungee jumping regulation.\(^{37}\) The need to act quickly, combined with the factors next discussed, resulted in a wide range of regulatory schemes. The summer of 1993 further exposed bungee jumping’s hazards, as two accidents brought about three additional deaths.\(^{38}\)

\(^{31}\) The state of Florida, which had subjected bungee operators to amusement ride regulations, immediately shut down the state’s 18 commercial bungee sites as inherently unsafe. Diane Rado, *Appellate Court Upholds State Ban on Bungee Jumps*, *St. Petersburg Times*, Aug. 4, 1992, at B1. The 90-day ban was meant to give the state’s Department of Agriculture and Consumer Services time to gather information from safety experts and to draft stricter regulations of the bungee jumping industry. *Id.*

Pennsylvania was the second state to temporarily ban bungee jumping, issuing a “cease and desist” order to seven bungee companies, with the directive that the companies be registered, the operations inspected, and the equipment documented as able to withstand the “normal stresses” of bungee jumping. *Pennsylvania is Second State to Ban Bungee Jumping*, *Atlanta J. & Const.*, July 25, 1992, at A12. The move was followed by a similar decision in New Jersey; the state subsequently required owners to supply engineering data and background information on workers. McShane, *supra* note 14. New Jersey later adopted a more comprehensive bungee regulation. *See infra* note 201.


\(^{33}\) Rado, *supra* note 31.


\(^{35}\) *Id.*

\(^{36}\) Among other restrictions, the interim regulations banned the use of ankle straps, set a 100-foot height limit, required that the soundness of jump platforms be certified by a structural engineer, and ordered that each site pass an official state reinspection before reopening. *State OKs Bungee Jumping Under New Regulations*, UPI, Aug. 10, 1992, available in LEXIS, Nexis Library, UPI File.

\(^{37}\) *See supra* notes 30-31.

\(^{38}\) In Colorado, a 20-year-old man was killed because he was attached to a bungee cord that was 70 feet too long for the jump height. *Cord Too Long in Bungee Jump*, *N.Y. Times*, July 2, 1993, at A11. William Brotherton jumped to his death from a hot air balloon that was hovering at 190 feet. *Id.* The bungee cord was appropriate for a 260-foot jump. *Id.* The chairman of NABA’s safety committee blamed the death on the company’s failure to observe safety standards. *Id.* The company, Bungee America, was not insured or licensed by the state. *Id.*
B. Difficulties in Determining Appropriate State Action

1. Sport Versus Amusement

One element that has contributed to the evolution of a wide range of regulatory approaches among the states is the unique character of bungee jumping. It defies classification as either a sport or an amusement. The distinction is relevant because there is an entire body of sports law\(^3\) that is distinct from the law of amusement rides.\(^4\)

Strictly speaking, bungee jumping fits the dictionary definition of "sport," which is "any activity or experience that gives enjoyment or recreation; pastime; diversion."\(^41\) However, it can be distinguished from other sports for purposes of legal analysis. At first glance, activities like parachuting or hang-gliding seem very similar to bungee jumping. All three activities allow the participants to take to the air and all contain an element of danger. Unlike skydiving or hang-gliding, however, bungee jumping requires no special training program, talent, or skill.

In a typical sport, the participant is able to achieve a certain skill level through practice, enabling the athlete to perform more complex maneuvers and reducing the risk of accident or injury. In stark contrast, once the bungee jumper has embarked upon the journey downward, the participant has absolutely no control over what happens.\(^42\) Viewed from this perspective, bungee jumping is more like an amusement ride, where, for the ride’s duration, the patrons temporarily, but totally, relinquish control.

A month later in South Carolina, two teenagers were killed when the elevator lifting them to the bungee platform collapsed and fell 135 feet to the ground. Two Teens Killed in Bungee-Jump Mishap, WASHINGTON TIMES, Aug. 12, 1993, at A7. Investigators said the elevator was improperly rigged to use cables, instead of running along a track. Id. A vacationer, 17-year-old Zachary Steinke, and a jump site employee, 19-year-old Michael Nash, died when one of the cables broke. Region in Brief: An Accident Waiting to Happen, ATLANTA J. & CONST., Aug. 12, 1993, at A3. State safety inspectors had been warned a few days earlier of possible equipment failure. Id. The owner subsequently was fined $277,270 for 10 alleged violations of the state safety code. Region in Brief: It’s A Fact, ATLANTA J. & CONST., Oct. 21, 1993, at A3.

Neither Colorado nor South Carolina had comprehensive bungee regulations in place when the accidents occurred.


40. See infra part III.

41. WEBSTER’S NEW WORLD DICTIONARY 1377 (2d college ed. 1970).

42. Jump operators attending a November 1992 hearing in New Jersey were “divided on whether bungee jumping is a sport, with participants knowingly taking the same kind of risks they would take jumping by parachute or ballooning...” [Dr. Maurice] Davidson, who has embarked on a study of bungee injuries, said jumpers have no control over the situation once they take off.” Burns, supra note 28.
By deciding to treat bungee jumping operations as amusement rides, some states were able to begin monitoring commercial bungee activity as soon as it became apparent that regulation was desirable, because regulatory mechanisms directed at amusement rides were already in place.

2. **Federal Versus State Regulation**

Another factor that contributed to the piecemeal approach by the states was a lack of guidance from the federal government. Since Congress has legislative authority over interstate commerce, and has had express jurisdiction over mobile amusement rides for several years, some federal involvement would not have been unexpected.

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43. This approach was taken by about half the states. Bentayou, *supra* note 29.


Just prior to bungee jumping's emergence in the United States, many states had evaluated their amusement ride regulations and enacted reform legislation to alleviate inadequacies. Id. at 205.

Perhaps the time and effort that had recently been expended in enacting and reforming these statutes contributed to the widespread willingness to categorize bungee jumping as an amusement ride, thereby sweeping it neatly within the ambit of existing regulations.

45. Congress is granted power under the commerce clause, U.S. CONST. art. I, § 8, cl. 2, to “regulate Commerce... among the several States...” In *Wickard v. Filburn*, 317 U.S. 111 (1942), the Supreme Court interpreted this power as extending to any activity that “exerts a substantial economic effect on interstate commerce.” Id. at 125.

Bungee jumping activities are often directed at tourists and vacationers from other states, are advertised via the interstate means of television and radio, and involve components of equipment that may have been manufactured in several different states. It follows that the federal government possesses the power to regulate bungee jumping if Congress so desires.


However, many bungee jumping operations are mobile. The amended definition of “consumer products” in the current law includes amusement rides that are “not perma-
The federal government was briefly involved in the issue of regulating bungee jumps from hot air balloons.\textsuperscript{47} It also banned jumping from structures within the National Park system.\textsuperscript{48} However, bungee regulation was left primarily to the states.

Although the federal government's failure to get involved in this area almost assured that regulation of bungee jumping would be inconsistent, this federal inaction in fact may be viewed in a positive light. The rapid proliferation of bungee operations and the corresponding increase in the potential for serious accidents, created a situation calling for \textit{immediate} intervention. The states were more likely to have the resources and staff to enact legislation and to implement safety programs quickly and efficiently. Interference from the federal government may well have retarded those efforts that were already underway.

3. \textit{Competing Interests}

In ascertaining the proper legal approach to regulating bungee operations, the states have had considerable difficulty balancing competing interests. A state's legislative authority is derived from the need to protect local interests.\textsuperscript{49} The proper balancing of those interests will often ultimately determine whether a state's action in a particular realm is valid.

Of paramount consideration are the interests of those who choose to partake of the bungee adventure.\textsuperscript{50} While liberty as en-

\textsuperscript{47} The Federal Aviation Administration balked at regulating bungee jumping from hot air balloons. After several months of indecision, the agency issued a six-paragraph internal memo requiring only that the balloons be certified as airworthy. \textit{Bungee-Jump Death Sparks Call for Ban}, supra note 27.

\textsuperscript{48} See Tracey Kaplan, \textit{Court Gets Jump on Gas Pipeline Bungee Jumpers}, L.A. TIMES, Aug. 29, 1992, at B3. In that incident, 10 men planned to jump from a 350-foot high natural gas pipeline in the Angeles National Forest. \textit{Id.} Only one or two were able to jump before a U.S. Forest Service Ranger arrived and stopped them. \textit{Id.} To deter future bungee jumping, the Forest Service planned to cite the organizer of the jump for violating a recently adopted federal regulation prohibiting bungee jumping off structures in national forests. \textit{Id.}

\textsuperscript{49} See infra notes 54-55 and accompanying text.

\textsuperscript{50} "No person shall be . . . deprived of life, liberty, or property, without due process of law . . . ." U.S. CONST. amend. V.

"[N]or shall any state deprive any person of life, liberty, or property, without due process of law . . . ." U.S. CONST. amend. XIV.

It is well settled that the concept of due process liberty encompasses a variety of fundamental interests relating to personal autonomy and choice. \textit{See generally} Joel Feinberg,
joyed by U.S. citizens generally includes the freedom to make personal choices about conduct that does not endanger or affect the interests of other individuals, a person's decision to undertake a bungee jump may in fact affect the interests of others. If, for example, the jump ended tragically, the jumper could become financially dependent on the state. If the jumper were killed or permanently injured, society and the jumper's family would also be deprived of the jumper's expected future contributions. The jumper's family also would be deprived of the jumper's future companionship. Thus, while some would contend that the states should not be so paternalistic in their legislation as to inhibit individual choice regarding personal conduct, the states would likely prevail on a challenge to their legislative authority.

In any event, the individual's interest in choosing to plunge from a great height with an elastic cord around the waist or ankle, conflicts directly with the state's interest in protecting its citizens from danger. The state's interest eclipses to some extent the individual's claim to complete personal freedom.

Autonomy, Sovereignty, and Privacy: Moral Ideals in the Constitution?, 58 Notre Dame L. Rev. 445 (1983). A more difficult question is whether participation in risky recreational activities is a fundamental right deserving of constitutional protection. A complete analysis of these constitutional issues is beyond the scope of this Note. However, since all laws limit personal autonomy in some way, it seems unlikely that courts would elevate to a constitutional level the right to engage in dangerous recreational activities.


52. For a thorough discussion of the constitutionality of "legal paternalism," see Feinberg, supra note 50.

53. In fact, the First District Court of Appeal in Tallahassee rejected such a challenge to Florida's emergency 90-day ban on bungee jumping in the summer of 1992. Rado, supra note 31. Florida's Department of Agriculture and Consumer Services, which had issued the ban, argued successfully that the state should not have to wait until a death occurs to take emergency action if it reasonably believes that a death could occur. Id.

54. The police power of the states is an "essential attribute" of government, encompassing the power "to place restraints on the personal freedom and property rights of persons for the protection of the public safety, health, and morals or the promotion of the public convenience and general prosperity." Black's Law Dictionary 801 (abridged 6th ed. 1991).

The police powers, derived from the sovereign powers of the states prior to the establishment of the federal government, are reserved to the states by the Tenth Amendment, which provides that: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." U.S. Const. amend. X. Chief Justice Marshall first used the term "police powers" in Gibbons v. Ogden, 22 U.S. (1 Wheat.) 1, 208 (1824), to describe the sovereign powers that the states had not surrendered to the federal government. See also Keller v. United States, 213 U.S. 138, 144 (1908), for the proposition that the police powers are generally reserved to the states by the Tenth Amendment.
Additionally, a state's power to regulate local commerce allows it to bring bungee regulation solidly within its legislative ambit by aiming the regulations at the business operators and their jump sites, rather than at the jumpers. Thus, while an individual's interest in freedom of personal conduct is substantial, it does not preclude state regulations that conflict with that interest.

In addition to the public's concern for personal freedom and the state's interest in protecting its citizens from danger, economic interests are also at stake. For the commercial bungee operators, people whose livelihood depends on bungee jumping operations, and for the states themselves, the economic aspects of bungee jumping are significant. While the states have legislative authority in this realm, regulation of a legitimate business should not be so burdensome as to make it financially infeasible for businesses to comply with the regulations. Such restrictions would amount to a significant encroachment on the interests of the people who invested in bungee operations and were subsequently forced to shut down because of overburdensome regulations. In addition to driving out existing operations, such regulation discourages new businesses from establishing operations in the regulating state. This deprives the state not only of commercial tax revenue, but also of revenue that would be gained by attracting additional tourists to the area.

Equipment manufacturers and others in the equipment distribution chain also have interests in bungee safety, because of the possibility that injured patrons will bring products liability actions against them. Plaintiffs who are injured while participating in sports or rec-

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55. Even though an activity affects interstate commerce, the state may regulate the activity under modern Dormant Commerce Clause doctrine, if the resulting statute passes a two-tiered test:

Where the statute regulates even-handedly to effectuate a legitimate local public interest, and its effects on interstate commerce are only incidental, it will be upheld unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits. If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities. Pike v. Bruce Church, Inc., 397 U.S. 137 (1970) (emphasis added).

56. See supra note 24.

57. See supra note 55.

58. Since Florida retracted its initial ban and subjected jump sites to more stringent regulations, only six of the 18 sites were able to reopen. Telephone Interview with John Weinel, Board Member, NABA (Feb. 1, 1993).

59. These include crane rental companies, bungee cord or harness sellers, and hardware retailers.

60. Lee R. Russ, Annotation, Products Liability: General Recreational Equipment, 77 A.L.R.4TH 1121 (1990). Products liability in the bungee domain is untested ground and
reaction will typically proceed against members of this group in an effort to reach a financially competent defendant.\textsuperscript{61} It follows then that crane, harness, and bungee cord manufacturers are concerned about their potential liability for bungee-related injuries.\textsuperscript{62} As possible parties to personal injury actions, this class of persons has to be considered in the weighing of interests to determine how best to regulate bungee activity.

As each state balanced the interests involved, the relative strengths of the diverse competing interests produced varying results.\textsuperscript{63} In some states, strong legislative or public outcries against the dangers of bungee jumping led to bans on the activity.\textsuperscript{64} In other states, proponents of personal freedom and of economic interests of bungee operators were heard loudest, and stringent regulation was not forthcoming.\textsuperscript{65}

The conflicting interests, along with the other obstacles to the development of a consistent nationwide approach to the situation, resulted in a wide range of techniques for regulating bungee jumping, from no regulation at all to a total ban on the activity.\textsuperscript{66} Between those extreme approaches, two more reasonable alternatives evolved:

\begin{itemize}
\item For a comprehensive treatment of products liability law as applied to amusement rides and recreational equipment, see Russ, \textit{supra}, and Lee R. Russ, Annotation, \textit{Products Liability: Mechanical Amusement Rides and Devices}, 77 A.L.R.\textsc{4th} 1152 (1990).
\item See Douglas G. Houser et al., \textit{Products Liability in the Sports Industry}, 23 \textsc{Tort Ins. L.J.} 44 (1987) (encouraging personal injury attorneys to proceed against multiple defendants on products liability theories).
\item Although virtually all major crane manufacturers have policies against use of their cranes for bungee jumping, they have little control over the cranes once the cranes are sold. Following a fatal crane accident in the summer of 1992, crane manufacturers campaigned to convince state and federal regulators to ban crane jumping, stating that cranes are not designed, manufactured, tested, nor intended primarily to lift people. \textit{No Jumpin' Off My Crane, supra} note 28.
\item For example, Maryland effectively banned jumping from cranes, because the state's regulations for amusement rides required permit applicants to submit specifications and approval from the manufacturer for the intended use. \textit{Sorry, Thrillseekers, Maryland Turning Away All Bungee Jumping Business}, \textsc{Baltimore Bus. J.}, Aug. 21, 1992, at 3. Since the crane industry was opposed to operators using the cranes for bungee jumping, applicants could not fulfill this requirement. \textit{Id.} Maryland later banned bungee jumping operations entirely. \textsc{Md. Bus. Reg. Code Ann.} § 3-503 (1993).
\item One week after Maryland banned crane-jumping, Massachusetts' new regulations restricted the sport to \textit{crane-jumping only}, outlawing jumps from hot air balloons and bridges. Cristine Gonzalez, \textit{State Bounces Balloons From Bungee Business}, \textsc{Boston Globe}, Aug. 30, 1992, at 27.
\end{itemize}
applying existing amusement ride laws to bungee jumping activities, and enacting statutes specifically aimed at bungee operations.

C. Desirability of Consistent Regulation

The current situation—a wide range of disparate strategies among the states—is inadequate to protect all the interests involved. To protect the interests at stake in the context of a dangerous recreational activity, a regulatory scheme must accomplish two objectives: (1) ensure the safety of the participants and (2) provide the means to fairly and predictably assess liability. The current inconsistency among regulatory techniques presents several major obstacles to achieving these two goals.

First, there is an inherent unfairness in the more extreme approaches because they protect certain interests to the exclusion of others. A complete ban on bungee jumping activity protects only safety interests, while failing to address economic concerns and personal freedom. An utter absence of regulation, on the other hand, allows economic and personal freedom, at the expense of ensuring the safety of participants.

Inconsistent regulatory schemes also are undesirable because operators who find one state's laws too restrictive can easily set up their operations in or move to more permissive environments. This approach penalizes, in the form of lost revenues, the prudent state that emphasizes the safety of its citizens and visitors. In addition, the prudent state does not have the ability to protect its citizens from danger; its citizens may simply cross the state border to partake of unregulated or lesser-regulated bungee jumping activities. Assuming the state’s regulations are reasonable in relation to the benefits sought, such an arrangement benefits only the fly-by-night operators who are unwilling to spend the money to comply with stringent regulations.

Conflicting regulations also result in a lack of predictability regarding the safety of the activity. A person who has bungee jumped in a state that strictly regulates the equipment and the personnel deserves assurances that another state will be equally concerned with the jumper’s safety. The public most likely assumes that bungee jump equipment has been inspected under the auspices of the state and that

67. See infra part III.
68. See infra part V.
69. The two extremes are total prohibition and total lack of regulation.
70. See infra part II.
71. Even bungee operators conceded that the industry was being invaded by unscrupulous money seekers who lacked training. Folk, supra note 22. “About 50% of the new operators receive no formal training,” said former NABA president Greg Glassock. Id.
the operators have been licensed, not realizing that some states virtually ignore bungee operations.\textsuperscript{72} It is not reasonable to expect members of the public to look for inspection stickers on the equipment, or to ask to see a bungee operator's license before taking the plunge, just as people do not normally scrutinize the credentials of carnival ride attendants. Some predictability can be gained in this area by setting and enforcing industry-wide standards with which operators must comply.

The lack of consistent regulation also impairs predictability in terms of who will be held responsible if someone is injured or killed. Each person involved in bungee jumping, from equipment manufacturers to jumpers, might reasonably expect a consistent approach to the issue of liability. Ideally, this expectation should not be defeated by the fact that an accident occurs in one state versus another. Unless regulatory approaches are consistent and operators are compelled to comply with industry-wide standards, litigation may produce inconsistent adjudication of liability.\textsuperscript{73}

Another aspect of liability that deserves consideration is the availability of sufficient insurance coverage for jump site owners. The public may reasonably expect people who conduct activities with an inherent risk of enormous liability, because of the potential magnitude of injuries, to carry enough insurance to cover such liability.\textsuperscript{74} Consistent regulations to enforce industry-wide standards, along with the commendable safety record that would likely result, would minimize potential losses to insurance providers and encourage them to make liability coverage available at affordable rates.\textsuperscript{75} On the other hand, the mélange of standards and priorities that exists in the current system could have the opposite effect on insurance carriers.\textsuperscript{76}

\textsuperscript{72} See supra note 29.

\textsuperscript{73} See infra notes 101, 107-08 and accompanying text.

\textsuperscript{74} For example, the more comprehensive state amusement ride statutes include provisions for liability insurance. Reiss, supra note 44, at 205 & n.85.

\textsuperscript{75} When bungee jumping first emerged as a business enterprise, insurers refused to cover the activity. Hard-to-Cover Clients Are Metairie Insurance Agency's Specialty, New Orleans City Bus., Nov. 2, 1992, at 17. Sports & Entertainment Insurance Services, an agency that specializes in clients whom many once considered "uninsurable," was able to provide coverage once air bags and other safety features became common. Id. In 1991, bungee jumping accounted for $3 million in premiums written through the agency. Id. The low level of claims dropped the cost of the insurance from $19 to $4 per jump. Id.

\textsuperscript{76} Joseph P. Hatch, president of a specialty underwriting firm based in Pine Bush, New York, noted that many bungee operators were "getting into it for the fast buck" and blamed the rapid growth of the industry for insurance companies' increasing denial of coverage. Bungee Jumping Nosedives After Two Serious Accidents, St. Louis Bus. J., July 27, 1992, at 10.
II

Unacceptable Approaches

A. Ban on Bungee Jumping

While a total prohibition on bungee jumping has the virtue of simplicity, it improperly infringes on personal freedom and on the economic interests of bungee operators. It gives undue prominence to the state's police power at the expense of other equally compelling interests. A state's total ban on commercial bungee jumping would probably withstand constitutional challenges, since the states have both a wide degree of latitude in regulating commerce and general police powers to promote public safety. However, such an approach does not reflect sound legislative policy since there are reasonable alternatives available that will protect a state's interests without such a considerable encroachment on personal liberty and economic interests.

B. No Regulation; Self-Regulation

A state's failure to assert authority over the bungee jumping industry would not pose a problem if the industry established a set of comprehensive standards, along with a mechanism to enforce compliance. In the absence of conscientious self-regulation, however, a state's disavowal of any authority leaves both its own interests and those of the public completely unprotected.

There are indications that self-regulation could be effective. Like the amusement park industry, the bungee jump industry clearly wishes to keep the activity safe for its patrons. Owners and operators want people to have confidence in the safety of bungee jumping, in order to attract more business. A good industry safety record also contributes to making insurance more readily available. Additionally, the bungee industry is motivated to improve safety measures by the fact

Hatch said the states' lack of knowledge about the activity was causing them to focus regulations on the wrong components. Rather than requiring "crash pads," Hatch advocated regulation of operators and equipment, such as cranes and bungee cords, because these are the factors that may fail. Id.

77. See supra note 55 and accompanying text.
78. See supra note 54 and accompanying text.
80. Reiss, supra note 44, at 207.
81. Id.
82. See supra notes 74-76 and accompanying text.
that serious accidents in the United States have primarily injured or killed jump personnel, rather than the paying public.\textsuperscript{83} Unlike operators in the amusement ride industry,\textsuperscript{84} bungee operators have not maintained a strong trade association for any substantial length of time.\textsuperscript{85} In the past, the North American Bungee Association (NABA) actively supported state legislation of bungee jumping, citing the need for the industry to maintain a reputation for and a commitment to safety.\textsuperscript{86} NABA is currently willing to work with the states to develop suitable regulations, but would like to see the states defer to industry expertise in formulating standards.\textsuperscript{87}

Bungee jump operators as a group might be wise to consider joining forces with the amusement ride industry’s trade associations,\textsuperscript{88} which are active in promulgating safety legislation, setting standards, and educating members about proper inspection and maintenance procedures.\textsuperscript{89} These amusement ride trade associations are generally respected by legislative bodies.\textsuperscript{90} Their “seal of approval” could help foster cooperation between the states and the bungee operators.

Unless bungee operators as a group act effectively to fill the void left by state inaction, the resulting scenario protects none of the interests at stake, not even those of the bungee operators. With no rules with which to comply, unscrupulous operators are free to destroy the reputation and safety record of the industry, thus potentially ruining the economic interests of legitimate operators. Safety concerns fall by the wayside in such a situation, as does any expectation of predictability in assessing liability when the shoddy operations lead to inevitable accidents.

\textsuperscript{83} Telephone Interview with John Weinel, \textit{supra} note 58.
\textsuperscript{84} See Reiss, \textit{supra} note 44, at 207-211, for a discussion of the extensive self-regulation of the amusement ride industry.
\textsuperscript{85} Prior to holding reorganizing meetings in January 1993, NABA had spent the previous eight months “in a black hole.” Telephone Interview with John Weinel, \textit{supra} note 58.
\textsuperscript{86} \textit{Id.}
\textsuperscript{87} \textit{Id.}
\textsuperscript{88} NABA is planning to send representatives to an amusement industry conference. \textit{Id.}
\textsuperscript{89} Reiss, \textit{supra} note 44, at 207-08.
\textsuperscript{90} \textit{Id.} at 211 & n.127.
III

A Valid Approach: Treating Bungee Jumping as an "Amusement Ride"

Between the two alternatives discussed above—an outright ban on bungee jumping and no regulation at all—lies a third alternative, currently being used by several states. This option treats bungee jumping like any other amusement ride and accommodates to some extent all of the interests involved. However, unless a state's amusement ride law is enhanced with regulations aimed specifically at the equipment and hazards unique to bungee jumping, this approach leaves room for significant improvement.

In states that have existing comprehensive amusement ride regulations, this approach is expedient and conserves legislative resources. It also enables the use of existing government inspection teams, so there is no need for bungee operators to shut down for long periods of time while states enact new laws and put inspection personnel in place. It allows the public the personal freedom to choose to bungee jump.

This approach at least partially accomplishes the two major objectives of regulating a dangerous activity: it enhances safety to some extent and it aids in the ultimate determination of liability in the event of an accident, ensuring that injured parties will be able to recover in appropriate circumstances.

The goal of safety is particularly important in an activity with a very slight margin for error and a tremendous potential for harm. Comprehensive amusement ride safety regulations can contribute to risk reduction at bungee jump sites in several ways. Requiring that an operator apply for and obtain a prior permit tends to inhibit corrupt or fly-by-night operations, especially if the statute provides per diem fines for noncompliance and a penalty for making false statements on an application. Presumably, even unscrupulous operators are not

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91. See, e.g., Del. Code Ann. tit. 16, § 6408 (1992) (including commercial bungee jumping operations under amusement ride safety inspection and insurance regulations); Cal. Lab. Code § 7901(a) (Deering 1992) ("Amusement ride' includes the business of operating bungee jumping services or providing services to facilitate bungee jumping . . . .").

92. The essential features of a comprehensive state safety program are: an operating permit requirement, a provision for regular inspections by trained individuals, a requirement that an amusement owner or lessee carry a minimum amount of liability insurance, an accident reporting requirement, and civil and criminal sanctions for violation of the statute. Reiss, supra note 44, at 205-06.

93. For example, the Florida amusement ride law provides for an administrative fine of up to $500 per day if the governing body finds that the attraction is being operated
likely to take the financial risk entailed in foregoing the permit process or falsifying an application. The issuance of an operating permit is typically contingent upon a satisfactory initial inspection and often there are provisions for subsequent periodic or event-based inspections as well.\textsuperscript{94} These provisions improve the likelihood that a dangerous condition will be observed and corrected before an accident occurs.

The most extensive amusement ride regulations also require prompt reporting of accidents.\textsuperscript{95} This allows for subsequent inspection in order to prevent further injuries.\textsuperscript{96} Notice of accidents also will alert the governing agency to potential problems at other bungee operations.

Although subjecting bungee jump operations to existing amusement ride regulations can enhance safety to some extent, even the most comprehensive amusement ride statutes are not likely to include standards applicable to the equipment used in bungee jumping.\textsuperscript{97} Consequently, inspection of bungee equipment is not as useful as it may be for other amusement rides. Also, a state's inspection team is not likely to have ample experience inspecting bungee cords, harnesses, cranes, or other jump platforms.\textsuperscript{98} Most troubling is the possibility that a state with only meager amusement ride regulations will treat bungee jumps under its existing statute.\textsuperscript{99} In that case, the regulations most likely will not contribute noticeably to the safety of the activity.

without required inspections or insurance, or with a defect that presents a risk of serious injury to passengers. FLA. STAT. ANN. § 616.0915(4)(e) (West 1993).

The statute also makes it a misdemeanor to make a false statement on a permit application. \textit{Id.} at § 616.121.

\textsuperscript{94} Reiss, \textit{supra} note 44, at 205 & n.84. Annual inspections are also common. \textit{Id.} Events that may trigger the need for further inspections include disassembly/reassembly and serious injury or death to a patron. \textit{Id.} at n.84.

\textsuperscript{95} \textit{Id.} at 205-06 & n.86.

\textsuperscript{96} \textit{Id.} at n.86.

\textsuperscript{97} For example, the Washington amusement ride regulation provided for inspection of the cranes used to lift jumpers, but ignored the harnesses and cords used in the jumps. Miller, \textit{supra} note 29.


\textsuperscript{98} "I would have to be out of my mind to feel qualified to inspect a [bungee] jump," said Jim Bear, one of Washington's three amusement ride inspectors. Miller, \textit{supra} note 29.

\textsuperscript{99} See Reiss, \textit{supra} note 44, for an analysis of the various amusement ride statutes.
Existing amusement ride regulations are more effective at achieving the second principal goal noted above: providing a means to fairly and consistently assess liability and ensuring recovery to injured parties if appropriate. One way amusement ride laws typically address this objective is by requiring operators to carry a minimum amount of insurance, usually between five hundred thousand and one million dollars. This ensures that an operator found liable for an injury-producing accident will be able to compensate an injured jumper, at least to the extent of the minimum coverage. Before an insurance claim is paid, however, liability must be determined.

Adjudicating liability in the event of a bungee jumping accident will probably arise in the context of a negligence action. Both amusement ride statutes and the case law pertaining to amusement ride accidents will be useful in predicting how liability will be assigned. In states where the legislature has clearly expressed through its regulatory scheme the intent to treat bungee operations as amusement rides, it would be reasonable for a court to do the same in applying negligence principles.

Owners and operators of amusement rides typically are held to a duty of ordinary or reasonable care. In applying this standard to bungee jump personnel, triers of fact would be asked to determine what degree of care a reasonable person would have exercised in like

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100. Reiss, supra note 44, at 205 & n.85.
101. There is no case law in this area yet. It is possible that a products liability claim also would be brought. See supra notes 59-62 and accompanying text.
102. One scholar noted that statutes governing mechanical amusement rides tend to make it easier for injured parties to sue the operator than to go through the costly and complex process of bringing a products liability claim. Russ, Products Liability: Mechanical Amusement Rides and Devices, supra note 60, at 1155.
103. This discussion is intended to provide an overview of how a bungee or amusement regulation aids in the adjudication of an action based in negligence; it is not meant as a thorough exploration of negligence law in the world of amusement and theme parks. A comprehensive analysis of negligence law in that context is beyond the scope of this Note and would necessarily include an explanation of contributory negligence, comparative negligence, and assumption of risk doctrines, as well as the effect of releases from liability, such as those printed on a ticket.

For an extensive compilation of the law in this area, see F.M. English, Annotation, Liability to Patron of Scenic Railway, Roller Coaster, or Miniature Railway, 66 A.L.R.2d 689 (1959), and J.H. Cooper, Annotation, Liability of Owner, Lessee, or Operator for Injury or Death on or near Loop-o-plane, Ferris Wheel, Miniature Car, or Similar Rides, 86 A.L.R.2d 350 (1962).
104. English, supra note 103, at 692; Cooper, supra note 103, at 353. But see Pajak v. Mamsch, 87 N.E.2d 147 (III. 1949) (holding operator of ferris wheel to highest degree of care, equivalent to that imposed on a common carrier); Gromowsky v. Ingersol, 241 S.W.2d 60 (Mo. Ct. App. 1951) (holding operator of “airplane ride,” in which miniature planes were suspended from cable attached to a tower, to degree of care of a common carrier). Jurisdictions so holding are in the minority. Cooper, supra note 103, at 355.
circumstances. In a negligence action, a statute regulating procedures, staffing, or training can aid a court in determining whether there has been a breach of duty, by helping to define reasonable conduct in the particular situation. Whether violation of a statute would be per se evidence of negligence varies by state. The more a statute is tailored to the particular activity involved, the more helpful it is to the trier of fact in ascertaining the actions of a reasonable person similarly situated. For this reason, regulations directed at amusement rides would be more effective if they were revised to include specifications for bungee equipment, jump sites, and bungee personnel.

Another negligence principle that has been applied in amusement ride cases is the absence of a duty to warn of obvious dangers associated with amusement rides or sports. Not only is there not a duty to warn of obvious dangers, but a participant is likely to be regarded as having assumed the risk of obvious dangers.

Bungee jumping undeniably entails obvious dangers. When a person leaps from a height equivalent to a multi-story building, the risk is readily perceptible. It is apparent to anyone of average intelligence that an unprotected fall from such a height would likely result in critical injury or death. Thus, applying the negligence principles used in amusement ride cases, there is no duty to warn bungee

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106. See supra notes 30, 38.
108. Purver, supra note 107, at 618.
109. This is the Florida approach. See infra part V.
110. This law was noted by the court in Daniel v. S-Co Corp., 124 N.W.2d 522 (Iowa 1963), an Iowa case in which plaintiff was injured on an outdoor trampoline. "It is well settled that a proprietor of a place of business is not required to warn invitees of a hazard which is open and obvious and as well known to the invitee as to the proprietor . . . ." Id. at 527.
111. This principle of amusement ride law was set forth by Chief Justice Cardozo of the New York Court of Appeals:

Volenti non fit injuria. One who takes part in such a sport accepts the dangers that inhere in it so far as they are obvious and necessary, just as a fencer accepts the risk of a thrust by his antagonist or a spectator at a ball game the chance of contact with the ball. . . . The timorous may stay at home. . . . A different case would be here if the dangers inherent in the sport were obscure or unobserved. Murphy v. Steeplechase Amusement Co., 166 N.E. 173, 174 (N.Y. 1929). The plaintiff in the case was injured on a "Flopper," a device that consisted of an upward-moving, sloped belt on which passengers stood or sat. Id. at 173.
jumpers of the possibility they will fall to the ground, and a jumper assumes much of the risk inherent in the activity.  

Because bungee jump personnel who are considered amusement ride operators are not likely to be held to an enhanced standard of care, and because a bungee jumper's assumption of the risk may well bar recovery for injuries caused by negligence in many jurisdictions, treating bungee jumping as an amusement ride does not ensure that the jump site operator will be found liable if an injury-producing accident occurs. There is, however, a measure of predictability to be gained from studying the amusement park case law for a particular jurisdiction. The case law will provide precedent for use in bungee accident cases, which should lead to consistent rulings.

IV
Trampolines

In some ways, bungee jumping is more similar to commercial trampoline jumping than it is to other sports or mechanical amusement rides. Like bungee jumping, trampoline jumping requires no particular skills, neither partners nor opponents, nor special protective clothing. A commentator's description of trampolining could have been about bungee jumping: "No external object is thrown, kicked, struck, or otherwise set in motion. Only the [participant] moves, propelled by his own exertions and the consequent reaction of the [equipment] itself."

The emergence of commercial bungee jumping on the U.S. scene closely parallels that of the "trampoline parks" of the 1950s

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112. A different result might follow if an injury were caused by a fall onto a defective air bag which had been placed on the landing area to ensure the jumper's safety. In Kungle v. Austin, 380 S.W.2d 354 (Mo. 1964), the plaintiff was injured when she fell onto a pad that had been incorrectly attached to the end of the trampoline. The court noted that this was not a hazard to which the jumper had voluntarily exposed herself, and that "a trampoline user should be permitted to rely upon protective pads affording the protection which their proper installation would provide." Id. at 359.

113. See supra notes 104-05 and accompanying text.

114. See supra notes 110-11 and accompanying text.

115. B.C. Ricketts, Annotation, Liability of Owner or Operator of Trampoline Center for Injury to or Death of Spectator or Patron, 8 A.L.R.3d 1427, 1429 (1966).

116. Id.

117. See supra part I.A.
and 1960s. Like the bungee phenomenon, trampoline centers proliferated across the country within a very short period of time.

The early legal treatment of trampoline parks failed miserably to protect the various interests involved in this dangerous recreational activity. It did not ensure the safety of the participants and it resulted in inconsistent and unpredictable adjudication of liability. Neither the public nor the courts initially appreciated the potential dangers of the activity, and thousands of people were injured before the trampoline fad subsided.

In deciding cases that resulted from these injuries, the courts began by looking to general negligence principles applicable to operators of other public amusements. The operator’s duty was merely that of ordinary care of a reasonable person in like circumstances. There was no duty to warn of obvious dangers. Because of the newness of the sport, safety standards were sparse, which meant that each court decided anew what constituted a breach of duty. Cases sometimes reached conflicting results. Generally, the operator-defendant prevailed.

When accident statistics were compiled in the late 1960s, the attitude of both the public and the courts changed. Trampolining was then perceived as the high-risk activity it truly was. Eventually,
strict standards were developed for the design and maintenance of trampoline equipment and for the supervision and training of the participants.\textsuperscript{131} Ultimately, most of the parks went out of business.\textsuperscript{132}

To prevent bungee jumping from suffering a fate similar to that of the trampoline parks, states need to focus on the areas in which the trampoline laws were lacking. Specifically, the states should make the public and the courts aware of the serious degree of harm that may be involved. This can be accomplished through public education, by requiring warning signs at bungee jump sites,\textsuperscript{133} and by promulgating specific standards. The public's awareness of potential dangers will add impetus to the development of safety standards.\textsuperscript{134} Judicial understanding of an activity's possible hazards enables the courts to determine the proper duty to impose on operators.\textsuperscript{135} The states should incorporate into their regulations comprehensive and specific safety standards for all of the equipment used in bungee jumping. In developing the standards and regulations, the states should pay special attention to the issue of training and licensing competent jump personnel. Florida's approach to bungee jumping addresses most of these concerns.

V

Florida's Approach: Bungee-Specific Regulations

A. History and Status of Bungee Regulation in Florida

Florida's Regulation of Bungy Operations\textsuperscript{136} is comprehensive: it defines very specific requirements for bungee operations, but it also subjects them to the "umbrella" of the statute pertaining to public fairs and expositions.\textsuperscript{137}

The "umbrella" of the public fairs and expositions statutes\textsuperscript{138} contains the essential elements required for amusement park regulations.\textsuperscript{139} It requires initial inspection of the amusement device prior to

\textsuperscript{131} Id. Following a number of studies in the 1970s of the kinds of injuries sustained on trampolines and how they occurred, the educational, medical and athletic communities agreed that trampolines should not be used in any unsupervised recreational setting. \textit{Id.} at 476-77.

\textsuperscript{132} Id. at 481.

\textsuperscript{133} See infra text accompanying notes 155-57 for Florida's approach to this element.

\textsuperscript{134} See supra text accompanying notes 80-81.

\textsuperscript{135} See Gerash, supra note 118, at 479.

\textsuperscript{136} FLA. ADMIN. CODE ANN. r. 5F-8.025 (1992). The statute notes that bungy is sometimes spelled "bungee." \textit{Id.} at r. 5F-8.025(1).

\textsuperscript{137} Id. at r. 5F-8.025(1)(b).

\textsuperscript{138} FLA. STAT. ANN. § 616 (West 1993).

\textsuperscript{139} See supra note 92.
issuance of an operating permit, annual inspections thereafter by a professional mechanical engineer, liability insurance of one million dollars per occurrence, and reporting of every accident related to the amusement device within twenty-four hours after the occurrence. It also provides for enforcement through per diem fines, misdemeanor penalties, and injunctions.

Because the amusement park regulations already in place contained the essential components, the state of Florida could have continued to regulate bungee jumping under this statute, with no further refinements. However, because Florida depends heavily on tourism for revenue, it had an especially strong interest in ensuring the safety of bungee jumpers. Safe amusements attract tourists; serious injuries and fatalities drive them away. This compelling interest induced Florida officials to take a vigorous role in evaluating the effectiveness of the amusement ride regulations as applied to bungee jumping.

In the interest of public safety, following the two accidents in the summer of 1992, Florida shut down all bungee operations. Public hearings were held and sites were allowed to reopen only under strict temporary regulations. This interim compromise was an attempt to provide some measure of protection to each of the interests involved: personal freedom of the jumpers, economic interests of the business owners, and the state and public interests in safety.

While the interim rules were in place, state officials drafted the permanent bungee regulations. The stated purpose of the new regulations is to “specify and give guidance on the site and site approval, testing of equipment, the management of the operation, the operating procedures, the provisions and emergency procedures relating to

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140. FLA. STAT. ANN. § 616.0915(5)(b)-(c).
141. Id.
142. Id. § 616.0915(21)(a).
143. Id. § 616.0915(23).
144. The statute provides for an administrative fine of up to $500 per day for failure to comply with provisions requiring inspections and insurance, or for operating an amusement with a defect that presents a risk of serious injury to passengers. Id. § 616.0915(4)(e).
145. The statute makes it a misdemeanor to make a false statement on a permit application. Id. § 616.121.
146. Id. § 616.28(3)(b).
147. See supra part III.
148. See supra note 32.
149. See supra notes 31-36 and accompanying text.
150. Rado, supra note 31.
151. Willson, supra note 34.
bungey operations." The forty-six pages of specific standards and rules should significantly enhance the safety of the sport by reducing the risk of equipment failure or human error.

B. Bungee Jumping Florida-Style in 1993

The Florida regulations will ensure that future bungee jumping experiences in Florida will proceed along these lines: Upon entering the site, Jumper's attention will be drawn to a warning sign stating in "bold capital letters that the Florida Department of Agriculture and Consumer Services does not endorse this activity and does not guarantee or warrant the safety of bungey jumping." The sign will state that bungee jumping "may be a dangerous activity and may result in serious injury or death to the jumper" and that "injuries and death have occurred relating to bungee jumping activities." Jumper will thus be aware of the gravity of potential harm should she decide to continue with the leap. If Jumper meets the posted medical, weight, and age restrictions, she then will be weighed twice on two separate scales by different staff members. The staff members will report Jumper's weight to the jump master, an experienced bungee jumping specialist who will use the weight to calculate the correct length of bungee cord.

Jumper then will be briefed by one of the well-rested staff members and preparation for the jump will begin, unless it has be-

153. FLA. ADMIN. CODE ANN. r. 5F-8.025(1).
154. This hypothetical jump is off a crane, a situation that Florida strictly regulates. Id. at r. 5F-8.025(13). Florida also allows tower jumping, subject to standards specific to that equipment. Id. at r. 5F-8.025(9), r. 5F-8.025(11). The state prohibits bungee jumps from hot air balloons, blimps, or similar vessels. Id. at r. 5F-8.025(14).
155. Id. at r. 5F-8.025(34)(a)3.
156. Id. at r. 5F-8.025(34)(a)1.
157. Id. at r. 5F-8.025(34)(a)2.
158. A jumper must be at least 12 years old. Id. at r. 5F-8.025(33)(a). Parental or guardian's consent is required for persons under 18. Id.
159. Id. at r. 5F-8.025(37)(a)2.c. The owner must provide and maintain a four-person operating team at each site. Id. at r. 5F-8.025(30)(c).
160. Each site must have a jump master. Id. at r. 5F-8.025(30). The jump master must be at least 18 years old, with "a minimum of 250 hours, or 1,250 jumps of incident-free experience as a jump operator under the supervision of a qualified jump master." Id. at r. 5F-8.025(30)(a). The jump master has complete control over the operation. Id. at r. 5F-8.025(30)(a)1. The jump master selects the bungee cord and adjusts the rigging for each jumper. Id. at r. 5F-8.025(30)(a)2. The jump master is also responsible for training other staff. Id. at r. 5F-8.025(30)(a)5.
161. Id. at r. 5F-8.025(15)(e)1.
162. Staff members must take regular breaks to "ensure that fatigue does not downgrade their ability to operate an incident free operation." Id. at r. 5F-8.025(32).
come so windy that the jump must be called off. Jumper will be hoisted no higher than 100 feet. At all times while on the platform of the crane, Jumper will be wearing a safety belt. Jumper can be assured that the crane is being operated by a certified crane operator with at least two years' experience and that the crane has undergone daily inspections by the jump site owner.

When Jumper reaches the jump point, her engineer-certified full-body harness will be attached. Jumper will then receive instructions and the rigging will be attached. At this point, the jump master will select the bungee cord and adjust the rigging. Jumper can be confident that the selected cord has been inspected at least four times daily for signs of wear and has been stored in such a way as to protect it from physical, chemical, and ultraviolet light damage.

After a recheck of all connections and harness attachments, final inspection by the jump master, and final instructions to Jumper, the countdown will commence. If Jumper has a heart attack while listening to the countdown, or at any time during the jump procedures, she will be able to receive CPR from the jump master. At the end of the countdown, Jumper will plunge from the 100-foot platform, feet-

163. Id. at r. 5F-8.025(12). The maximum wind speed will have been predetermined by an engineer and noted in the operating manual for the jump site. Id.
164. Id. at r. 5F-8.025(8).
165. Id. at r. 5F-8.025(19)(b). Life lines with a minimum breaking load of at least 4,900 pounds shall also be attached to all bungy personnel while on the working platform. Id. at r. 5F-8.025(19)(a).
166. Id. at r. 5F-8.025(13)(c).
167. Id. at r. 5F-8.025(13)(o). There are four pages of specifications relating to crane operations. Id. at r. 5F-8.025(13).
168. Id. at r. 5F-8.025(16)(a). Ankle strapping is prohibited under the Florida regulations. Id. at r. 5F-8.025(16)(e).

The full-body harness will have been certified as being in accordance with requirements from one of three nationally known organizations: the Union Internationale Des Associations D'Alpinisme, the National Fire Protection Association, or the American National Standards Institute. Id. at r. 5F-8.025(16)(a)1-3.

All ropes used for holding or lowering the jumper, as well as all hardware, must also meet the specifications of one of those three groups. Id. at r. 5F-8.025(17)-(18).
169. The regulations do not specify what instructions are required.
170. In addition to specific standards for each piece of equipment, the regulations incorporate by reference the ASTM Committee F-24 Standards on Amusement Rides and Devices, 4th ed., 1992. Id. at r. 5F-8.025(4)(a).
171. Id. at r. 5F-8.025(30)(a)2.
172. Id. at r. 5F-8.025(20)(j)1.
173. Id. at r. 5F-8.025(26).
174. Id. at r. 5F-8.025(37)(a)5.
175. Each site must have at least one jump master who is CPR and first aid certified. Id. at r. 5F-8.025(29)(a).
first because she is in a full-body harness, straight toward a safety air bag covering the entire landing site, including the area necessary for all rebound angles.

Once the rebounding stops, Jumper will be carefully lowered to the landing area where she will be given time to recover from the jump before being moved from the clean, smooth, padded surface of the landing area. If she needs to sit and recover, she may move to the adjacent "recovery area." Thanks to the new Florida regulations, her jump has progressed safely.

C. Balancing the Competing Interests

The regulations prescribing the foregoing sequence of events reflect a balancing of competing interests. By setting detailed equipment standards and inspection requirements, the regulations strive to assure an incident-free experience for all jumpers. By directing many of the procedures to be followed by jump personnel, the regulations will assist in adjudicating liability should an accident occur, since a court in a subsequent injury case will have an idea of what the rulemakers would consider reasonable conduct under the circumstances.

These goals are not achieved without some sacrifice by each group of interested parties. The legislature's primary concern of accident prevention seems to have eclipsed other interests to some extent. For example, in terms of personal freedom, jumping with a full-body harness from a 100-foot tower with an air bag covering the landing site is a far cry from a headfirst, death-defying leap from a hot air balloon.

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176. Although a jumper could actually begin by diving headfirst toward the ground, as soon as the bungee cord starts to become taut, it will bring the jumper back to an upright position. See State OKs Bungee Jumping Under New Regulations, supra note 36. With ankle straps, on the other hand, cord failure would always result in the jumper hitting the ground headfirst. Id.

177. The air bag also must be certified by a professional mechanical engineer. Id.

178. Id. at r. 5F-8.025(10).

179. Id. at r. 5F-8.025(24)(e).

180. Id. at r. 5F-8.025(24)(d).

181. Id. at r. 5F-8.025(24)(f). The "recovery area" is simply a spectator-free area adjacent to the landing pad, where a jumper can sit and regain her wits, if necessary. Id. at r. 5F-8.025(24)(a),(f).

182. An "incident" is "an event that could or does result in injury to a person, damage to equipment, or the interruption or stopping of bungy jump operations." Id. at r. 5F-8.025(2)(f).

183. In determining the standard of care that is required from jump personnel, a court may consider violation of the regulations as evidence. See supra notes 107-09 and accompanying text.
300 feet in the air. While there are perhaps jumpers who will appreciate Florida's new safety standards enough to take the plunge now, whereas before they would not, the real "daredevils" will find their personal freedom narrowed. Even for those whose bungee jumping aspirations did not extend beyond jumping from 100 feet in a body harness, paternalism in the form of mandatory air bags and warning signs about possible death and injury may substantially detract from the experience. Whether jumpers will appreciate or resent the regulations will depend upon their motivations for participating. If a person's enjoyment of the activity is rooted in the physiologically uncontrollable adrenaline rush produced by the jump itself, as distinguished from the excitement of taking genuine risks, the added safety features will enhance the experience. However, true thrillseekers, drawn to risky adventures by the real possibility of confronting death—characteristic of bungee jumping a few years ago—are likely to perceive a substantial limitation on their personal freedom.

In terms of the economic interests of bungee site owners, Florida's bungee business deteriorated significantly after the summer of 1992, but not necessarily because of the new legislation. The accidents, the resulting uncertainty about bungee jumping's safety, and the temporary ban tainted bungee's former image as a relatively safe weekend extravagance. The passing weeks without revenue forced some bungee site owners out of business. As of May 1993, only five of nearly twenty jump sites had reopened in Florida, and the cost of a jump had dropped from around $75 to around $25. The timing of the ban also presumably contributed to bungee's inability to bounce back. The ban snatched momentum from the activity at the peak of its popularity, and the new legislation went into effect at the end of the summer, when many of Florida's vacationing visitors were returning to their home states.

185. At least one first-time jumper was grateful that an air bag was there to save his life following a failed jump. Victor Volland, Bungee Jumper Aching All Over One Day Later, St. Louis Post-Dispatch, July 7, 1993, at A3. Marty Hatch, 39, escaped with only minor injuries when bungee jump operators neglected to attach a cable to the cord around his ankle. Id. Hatch free-fell from a 200-foot crane, unaware of the mistake until he hit the air bag. Id.


187. Id.

188. Id.

189. Id. Nationally, the number of operators dropped from about 250 in 1992 to about 100 as of May 1993. Id.

190. Id.
As for the economic impact of the legislation itself, the reopening of five sites indicates that compliance with the statute's regulations is economically feasible. For a discerning, safety-conscious public, the new emphasis on safety could eventually result in more jumpers, thereby increasing revenue to both the state and the jump site owners.

The statute also preserves the economic interests of mobile crane bungee operations. The regulations do not prohibit crane jumping, so jump operators may still roam from town to town, in search of new customers. Since each crane must have a current registration with the Department of Agriculture and Consumer Affairs, it is unlikely that irresponsible fly-by-night operators will bring their mobile operations into the state, thereby undermining the economic security of legitimate operators.

Crane manufacturers may not be satisfied with the new regulations, which require jump site owners to "comply with the crane manufacturer's operating manual or instructions, except as modified by the professional mechanical engineer who certifies the crane as suitable for use in bungy jumping operations." However, they may be able to insulate themselves from liability by, for example, publishing official policies against crane jumping.

D. Improving the Florida Regulations

Florida's regulations are sorely deficient in one major area. They do not adequately address the human factor. Since four of the six known bungee-related fatalities in the United States were jump employees or instructors, with each accident attributable to human error, training and competence of jump personnel should be a dominant element of bungee regulations.

The Florida regulations require a team of four staff members to orchestrate the jump and defines their duties, but their specified qualifications are meager indeed: the jump master must be at least

192. Id. at r. 5F-8.025(13)(a).
193. Id. at r. 5F-8.025(13)(e) (emphasis added).
194. Products liability is a separate and complex area of the law and not the focus of this Note. See Russ, Products Liability: General Recreational Equipment and Products Liability: Mechanical Amusement Rides and Devices, supra note 60, for a compilation of sources relating to products liability and recreation.
195. See supra notes 27-28, 38.
196. See supra notes 27-28, 38. Although one 1993 accident happened when an elevator cable broke, the real cause was that jump personnel had improperly rigged the elevator to be lifted by cables, instead of allowing it to run along tracks. See supra note 38.
198. Id. at r. 5F-8.025(30).
eighteen years old and have a minimum amount of supervised experience.\textsuperscript{199}

The state should work with the bungee industry to define a comprehensive training program for all jump personnel, with the objective of certifying every employee actually involved in the jump.\textsuperscript{200} The training program should include instruction as to safe jump procedures and thorough equipment inspection, and should instill in the trainees an appreciation of the risks inherent in the activity. A segment of the training should emphasize the employee's personal conduct at the jump site. The result would be well-informed and appropriately cautious jump personnel. A bonus for the bungee industry would be a possible improvement in the public's perception of the competence of bungee personnel.

States wishing to use the Florida bungee jumping regulations as a prototype for their own approach should conscientiously augment the statute with sections devoted to jump personnel qualifications.

\section{VI
Conclusion}

Bungee jumping burst onto the American recreational scene with astounding momentum. Within approximately two years, up to a million thrillseekers seized the chance to take part in the adrenaline-pumping, death-defying experience, while others merely watched, fascinated but perplexed that anyone would choose to jump from a great height with the equivalent of a giant rubber band around an ankle. For the most part, the government took a wait-and-see attitude in terms of regulating the activity.

As the dangers became clear in the summer of 1992, with a handful of people seriously injured or killed in bungee-related accidents, the states began actively to consider the problem of regulating an activity that defied conventional classifications. The unique character of the activity made it difficult for states to ascertain the correct legal strategy. The result was a panoply of approaches, with the state of Florida in the forefront of bungee-specific regulations and standards. The Florida approach incorporates existing law pertaining to amuse-

\textsuperscript{199} \textit{Id.} at r. 5F-8.025(30). There are also restrictions on who may operate a crane. The crane operator must be certified with at least two years' experience. \textit{Id.} at r. 5F-8.025(13)(c).

\textsuperscript{200} NABA is understandably concerned about the safety of jump employees and is willing to work with government officials to define these standards. Telephone Interview with John Weinel, \textit{supra} note 58.
ment rides, but improves on that approach by addressing the distinctive characteristics of bungee jumping.

In order to protect the interests at stake, the states need to adopt similar regulatory approaches. The state of Florida expended considerable time and effort developing a comprehensive set of rules that addresses most of the issues surrounding the safe operation of bungee jump sites. This set of rules is a good starting point for other states and requires only slight modification to be complete. Revision is particularly essential in the area of personnel training and certification, to decrease the likelihood that human error will cause an accident.

It is important that the states take a consistent approach to regulating bungee operations, that the regulations be specific enough to accommodate bungee jumping’s unique features, and that these laws be adopted soon. Otherwise, there is the risk that bungee jumping will evolve in much the same way that trampoline parks did in the 1960s. In that situation, the courts and the public treated trampoline parks like any other public amusement, and many people were injured before adequate standards were developed and adopted. The evolution of bungee jumping to date corresponds in many ways to that of the trampoline parks, but swift adoption of statutes comparable to the Florida regulations, along with conscientious enforcement of those regulations, could help thrust bungee jumping beyond its present dangerous stage into a safer, more predictable phase of development.


Additionally, Georgia’s bungee regulation, adopted prior to the 1992 accidents, is quite similar in scope to the Florida regulation. GA. COMP. R. & REGS. r. 300-8-3-.01 to -.21 (1993).