John McKay, Tom Osborne, Gene Stallings and Pat Dye, to name a few. Add to those, from the pro ranks, Tom Landry, Joe Gibbs, Hank Stram, Paul Brown, Curly Lambeau and Jack Pardee, and you begin to get a feel for the history of this site.

The most notable coaches, however, would have to be Paul "Bear" Bryant and Ralph "Shug" Jordan, who for years shared their Alabama and Auburn rivalry here. In fact, the game is still contested at Legion Field on a regular basis, and still creates the same fire and fury as before.

Great players are way too numerous to name; a thumbnail list includes Pat Sullivan, Harry Gilmer, Don Hutson, Joe Namath, John Stallworth and Bo Jackson. The list could go on and on.

Begun in 1926, the stadium opened on November 19, 1927, with an inaugural game featuring Howard College (now Samford University) against Birmingham-Southern College. The stadium was named Legion Field in 1927, in honor of the American Legion, and stands as a memorial to those who gave their lives in the service of their country.

One of the major challenges facing the Birmingham Soccer Organizing Committee was the conversion of Legion Field's artificial grass to a natural grass surface. One of the requirements of the International Olympic Committee was that all soccer matches be played on natural playing surfaces. At the time, the playing surface for Legion Field was artificial turf and had been since 1972. Upon award of the soccer matches, it became necessary for Legion Field's surface to be transformed from a synthetic playing surface to natural grass with a slope of one percent or less, which is required for soccer.

"This is a once-in-a-lifetime opportunity for the city of Birmingham," says Alan Blalock, of Birmingham-based Blalock, Pate Associates, architects of the Legion Field surface. Blalock also designed the playing surface for the 12,000-seat Hoover Metropolitan Stadium, home of the Birmingham Barons, Class AA Southern League farm club of the Chicago White Sox.

"Birmingham is definitely a sports town," says Blalock, "and this is evident from the amount of excitement and



The field's new drain lines, a vast improvement over the previous system, are made of Schedule 40 PVC pipe with solvent weld joints. This technique forms a rigid monolithic drainage system that can pull 80,000 gallons of water per hour off the field.

"Birmingham is definitely a sports town," says Blalock, "and this is evident from the amount of excitement and support that our fans are showing for the 1996 Summer Olympics."

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Blalock also notes that Birmingham was able to secure the Men's Team USA for two events - which will add to the excitement. "Having 80,000 fans screaming for one team could possibly give them an advantage," he adds.

Controlling the Field

The field re-construction was begun in January 1995 and completed in June 1995. Under the direction of Blalock,

Coston Construction Company, the general contractor, used bulldozers to remove the synthetic turf and create a basin for the installation of Warren's Power Drain Athletic Turf System. When the excavation of the old field was complete and 900 truck loads of soil had been removed from the stadium, crews then built a flat sub-grade, approximately 12 inches below what would eventually be ground level. The sub-grade was then covered with a plastic liner, which prevents water from coming up below the sub-grade to interfere with the field's management. The liner also gives the turf management team more control over conditions on the field.

"The next step was the installation of a series of drainage pipes - three miles in all. A series of six-inch, four-inch and two-inch lines were connected to the surface of the sub-grade," Blalock says. The drainage system and the playing surface were installed by STN Sports, a division of Southern Turf Nurseries, a specialist in athletic field construction. Blalock says the drain lines, made of

continued on page 12

Olympic Soccer

continued from page 11

Schedule 40 PVC pipe with solvent weld joints, form a rigid monolithic drainage system.

The irrigation system and drain lines were then covered by 8,000 tons of sand to provide a good base and further help drainage. The next step was the incorporation of peat moss to create a four-inch layer on which 110,000 square feet of washed certified Tifway 419 Bermudagrass sod was installed.

"The system will allow the turf management team to control on-field conditions with relative ease," says Blalock.

Water seeps through the ground and is collected in the two-inch pipes. The small pipes drain into the four-inch pipes, which drain into the six-inch pipes. The water is then carried into a concrete chamber, located under the east stands, where it is discharged.

"Under many situations, gravity flow will be enough to handle the drainage.

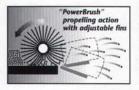


Alan Blalock shows the field's progress one week after 110,000 square feet of washed certified Tifway 419 Bermudagrass was installed.

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Water will naturally flow through the pipes and off the field," Blalock says. "However, under rainy conditions pumps will be used to draw excess water from the soil profile. A series of controls allow additional pulling power to be applied to the field in the presence of excess or standing water. The pumps can pull 80,000 gallons of water off the field per hour. That is equal to more than three acre-inches of water per hour."

The field can be watered by six giant off-field irrigation heads around the perimeter of the field. Each head distributes approximately 440 gallons of water per minute.

A Host of Games

"The field held up extremely well this past football season," says Blalock. "After 20 football games, more than double the use most natural (surface) stadiums see, we didn't have any serious turf damage or tears."

After construction, the maintenance team of Coston Construction, Blalock, Pate Associates and STN Sports was employed by the city of Birmingham to perform all maintenance tasks from June 1995 through August 1996.

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Olympic Soccer

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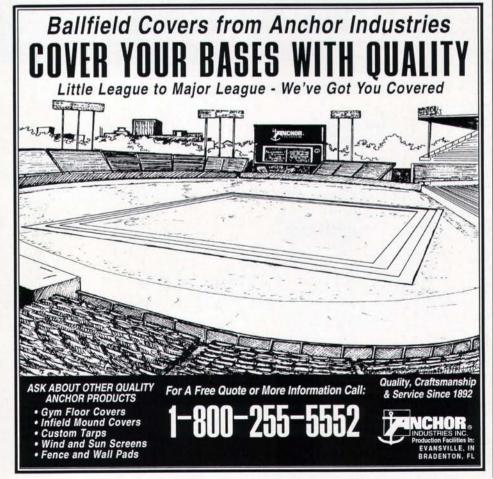
During the 1995 football season, Legion Field's new natural grass surface hosted games for the CFL Birmingham Barracudas, the UAB Blazers, University of Alabama Crimson Tide, the Labor Day Classic, the Magic City Classic and the Alabama Class Six A State High School championship game.

Blalock says the grass field should be strong enough to handle the total of 11 preliminary men's and women's soccer matches over an eight-day period during the Summer Olympics. Since December, the field has been allowed to recover from the busy season.

Blalock says that the winter rye which was planted to give the field color in the late season, as well as to protect the Bermuda through the winter months, was killed with a herbicide in late March. "Around the first of May, we'll start a field renovation project and cut the grass to about 3/8 inch. Over the next 35 days, we'll



The irrigation system and drain lines were covered by 8,000 tons of sand to provide a good base and optimal drainage.



grow the Bermuda back under a very strict regimen," Blalock says. "By mid-June the field will be beautiful."

Blalock says he expects the field will "show stress" near the goals during the soccer matches, but the field will be cut and watered every night at the conclusion of each match. "That puts the grass back in good contact with the soil."

Blalock says there are three ingredients to a good playing surface, "good design, proper construction and good maintenance. Though it took a great amount of time, we were pleased to be involved in the maintenance activities. It is critical to employ proper maintenance techniques, particularly on a sand profile field. Mowing, watering, fertilizing, application of herbicides, iron and turf dyes are all critical elements to an excellent playing surface."

Blalock expects the temperature on the field during the summer months will be 20 to 30 degrees cooler than with the old synthetic surface. In addition, the surface will offer spectators in the stadium cooler summertime temperatures and a pleasing natural green color.

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SportsTURF

No Such Thing as a Safe Field

By Todd Detzel

The law requires that every suit state specific reasons why the defendant is liable (causes or actionability that make him or her liable) based upon an accepted legal theory of liability. A legal theory of liability lists conditions, as defined by the law and interpreted by the court, which must be proven for a person or entity to be found liable for the harm done. The case will be dismissed if all of the con-

Three generally accepted legal theories of liability in tort law are, typically, used by plaintiffs in injury cases:
(a) negligence, (b) strict liability, and (c) nuisance.

ditions are not met. Note that safety

plays no part in any of the theories of lia-

The Three Theories

bility outlined below.

Currently, most cases rely on negligence for cause. There are four conditions that must be met for a finding of negligence.

- 1. A duty, or obligation, recognized by the law, requiring the person to conform to a certain standard of conduct, for the protection of others against unreasonable risks.
- A failure on the person's part to conform to the standard required: a breach of duty.
- A reasonably close causal connection between the conduct and the resulting injury.
- 4. Actual loss or damage resulting to the interests of another.

One important aspect of negligence theory, and why it is often used for cause, is that punitive damages may be assessed by a judge or jury if the negligence was willful and wanton.



Fields should be walked daily for obviously unsafe conditions. Photos courtesy: Floyd Perry.

resulting from the activity, although he has exercised the utmost care."

Strict liability has been associated with "products." However, a recent California Court of Appeals' ruling may have great impact in its utilization as a theory of liability in the sports turf area. The case resulted from a fall in a hotel bathtub that resulted in a serious injury. The appeals court ruled that it was unreasonable

Strict liability may also be used for

cause. It has the following definition: "One

who carries on an abnormally dangerous

activity is subject to liability for harm to

the person, land or chattels of another

court ruled that it was unreasonable to expect an individual to conduct tests to determine the coefficient of friction of a hotel bathtub. Therefore, the hotel room was a "product."

This rationale can logically be extended

This rationale can logically be extended to sports turf. It is as unreasonable to expect the users of a sports field to use a Clegg decelerometer to determine the field's hardness as it is for a hotel guest to determine the coefficient of friction of a bathtub.

Another theory of liability that can be used by plaintiffs is the nuisance theory. Some courts hold that the nuisance theory may be applied in the case of personal injury. However, the burden of showing a significant harm and that the invasion of his rights was intentional and unreasonable, or not actionable under other liability theories, is on the plaintiff. In addition, the plaintiff must demonstrate a particular damage or harm of a kind different from that suffered by other members of the public.

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ome sports turf managers and administrators believe they will be relieved of liability for an injury if their fields aren't any worse than those of other school districts (or towns or recreation districts). This belief only survives because they have not yet been sued and lost or settled out of court.

Both professional turf managers and lay people speak about safe fields as though *safe* has a precise scientific, technical and legal definition. This is unfortunate because it obscures the truth – there is no such thing as a safe field!

A break must be made with the mystique surrounding the word safe. The Random House dictionary defines safe as "secure from *liability* to harm, injury, danger or risk." The legal issue is liability.

It is clear that a sports turf manager's job is to limit potential liability. However, an understanding of applicable law is necessary to see why the legal issue is liability not safety. California tort law is used in the following sections since it, typically, represents legal trends that are often used in other state courts.

Obligations

For legal purposes, a sports turf management program faces two kinds of obligations: contract (a binding promise) and tort (an obligation imposed by law or, in practical terms, doing what a "reasonable man" would do).

Most suits are brought under tort law rather than contract law. A tort is a civil wrong inflicted otherwise than by a breach of contract. The elements of a tort are (a) a wrongful action or inaction and (b) an injury to some person or property.

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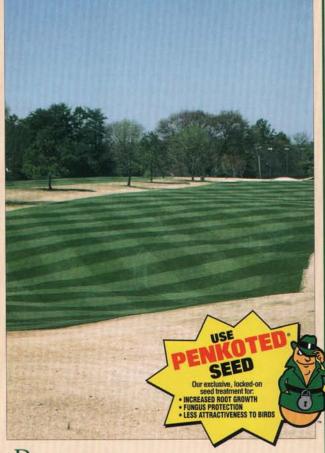
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Field Safety

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The plaintiff's attorney will attempt to cite as many theories of liability as possible. The reason is that the defendant's attorney will attempt to have the case dismissed if the facts do not conform to the theory of liability presented in the filing. Regardless of the particular theory(ies) of liability posited in a suit, the injury itself will be used as the basis for demonstrating that the conditions of at least one of the theories of liability were fulfilled.

Rising Liability

How might liability arise?

One section of the civil code of California states, in effect, that each and every one of us has a *duty of care* toward everyone else. This means we must take care not to cause injury to the person or property of another individual. If we do not exercise such care, we can be held liable for the damage done.

An issue currently being litigated is the question of *foreseeability*. Was the



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injury or harm reasonably foreseeable? Rulings by the California Supreme Court indicate that foreseeability is going to be greatly extended. Foreseeability closes the lock in liability suits. This is of crucial importance to sports turf managers! In essence, the theory of foreseeability states that there is no such thing as an accident; that is, injuries do not occur

without cause. Either the user and/or field conditions were responsible for the injury.

About 20 years ago, the California Supreme Court advanced the notion of comparative negligence. If the defendant can show some degree of contributory negligence, then the degree of fault can be reduced. Unfortunately, it is usually difficult to prove that a user of a field shares some part of the responsibility for an injury.

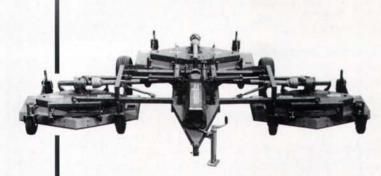
Although there may be mitigating circumstances involving the plaintiff, sports turf does not lend itself to a defense that a high liability field condition occurred spontaneously and could not have been foreseen. The defense must attempt to demonstrate that the field condition that caused the harm was an act of God and not foreseeable. Any expert witness can destroy this defense almost 100 percent of the time.

Sometimes an entity will attempt to elude liability by posting a sign such as "You use this field at your own risk!" Such

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