

Super Bowl XXX

Cowboys confident coming into game

TEMPE, Ariz. — The Dallas Cowboys are happy to be home. That's right, even in Tempe, Arizona they feel right at home. As a matter of fact, they feel at home anywhere the Super Bowl is.

Upon their arrival in Tempe last weekend, the Cowboys established their physical presence at Super Bowl XXX, however many believe that they arrived mentally months ago.

Backing up this overwhelming confidence is that fact that they won back-to-back titles after the 1992 and 1993 seasons, and came just one game short of their chance at repeating last season.

"It's our house," is how Dallas' star receiver Michael Irvin thinks of the Super Bowl. "That's where we belong."

The Cowboys became sweet

on the theme "going home" after handily defeating the Green Bay Packers 38-27 in the NFC championship game. "I know that within our own team and organization that since we won the Super Bowl back in '92, it's been a goal of this team every year going in," says Dallas' Troy Aikman.

With the exception of San Francisco, it seems that no other NFL team but Dallas terms the season as a disappointment when it ends short of the Super Bowl.

Many feel, however, that it's easy to feel confident when you can build a team like Dallas has. Led by one of the league's most explosive offenses, the Cowboys will again rely on Aikman, Irvin, and of course mega-star running back Emmitt Smith, to lead them to their third



Super Bowl title in four years. Then throw in Deion Sanders on both offense and defense, and you'd feel at home almost anywhere (anywhere the Super Bowl is, that is...).



Tough trio: (L-R) Troy Aikman, Emmitt and Michael Irvin make the Cowboys' offense go.

Steelers feel they have nothing to lose

SCOTTSDALE, Ariz. — Dallas Cowboy receiver Michael Irvin shrugged off questions last week about the return of Pittsburgh Steeler and six-time Pro Bowl cornerback Rod Woodson, suggesting the Steelers weren't crazy enough to take such a risky chance of playing him in such a huge game (Super Bowl XXX).

However, Pittsburgh coach Bill Cowher's gamble to play Woodson, who had a near career-ending knee injury in the Steelers' season opener last September, perhaps best sums up the Steelers' mood upon their arrival in Arizona earlier this week.

Pittsburgh quarterback Neil O'Donnell has suggested that the Steelers, cast as 13 1/2 point underdogs in the game, may actually be looser and more relaxed than the highly favored Cowboys because they are perceived as having little-to-no chance of winning.

"The Colts had that kind of attitude for three weeks, and they came within one play of being here," O'Donnell says. "They went out loose and had some fun." Pittsburgh won the AFC

championship game by holding off this season's Cinderella team, the Indianapolis Colts, 20-16.

As far as Super Bowl XXX is concerned, however, the Steelers defense knows it will have its hands full in trying to contain Dallas' lethal offense, led by Aikman, Smith and Irvin. But offensively, Pittsburgh isn't too shabby either. The Steelers' ground attack, led by Erric Pegram and 250-pound back Byron "Bam" Morris, will definitely put Dallas' beat-up defensive line to the test, not to mention that O'Donnell has four very capable receivers to throw to in Yancy Thigpen, Ernie Mills, Andre Hastings and Kordell "Slash" Stewart.

"Sure, the Cowboys are confident," Cowher says, "And they have every reason to be. They've backed up their talk in recent years. But at the same time, we've played good football for the last three months, and we want to finish off the season right. I've told our team that nobody remembers the losing team."

Win or lose, though, you can bet that this Steelers team won't be forgotten any time soon.

Tampa Bay Names Dungy Head Coach

TAMPA BAY, Florida — The Tampa Bay Buccaneers looked to change its 13-year string of losing seasons earlier this week by naming highly regarded Tony Dungy as head coach. Dungy, who broke into the NFL as a player in 1977, now becomes the NFL's third current black head coach. Minnesota's Dennis Green and Philadelphia's Ray Rhodes are the others.



Tony Dungy

The Bucs signed Dungy, 40, to a six-year contract. He served as Minnesota's defensive coordinator the past four seasons with the Vikings ranked No. 1 in defense in '93. Bucs owner Malcolm

Glazer called Dungy "not only one of the finest coaches in the NFL but...also one of the finest people."

"We feel that we're going to make a run at the playoffs," Dungy said. "We don't expect the fans to have to wait."

SCIENCE MATTERS

The physics of football

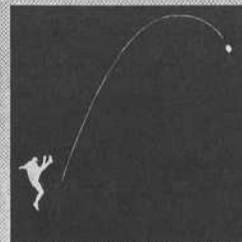
Hidden forces at work on the football field

THE FORCES

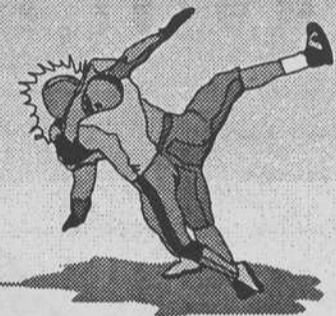
Being hit by a 250-pound linebacker moving at 20 mph would feel like falling off a 15-foot ladder while wearing protective pads.



A punter tries to kick the ball so it stays in the air at least 4 seconds. To do that, the ball must leave the punter's foot at about 50 mph and rise to about 65 feet.



Momentum is mass (body weight) multiplied by velocity (speed.) It makes it possible for a 200-pound defensive back to tackle a ball carrier with the force of a 260-pound lineman.

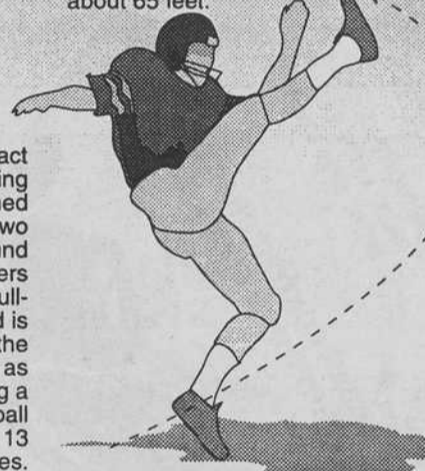


A lineman does not have time to build up speed before a tackle. He relies on mass to overcome a ball carrier's momentum.

The lighter defensive back can build up velocity, developing the same momentum with less mass.



The impact of being sandwiched between two 220-pound players running full-speed is about the same as catching a bowling ball dropped 13 stories.



THE AERODYNAMICS

To complete a long pass, a quarterback must control the ball's spin, angle of attack, trajectory and velocity.

Like an airplane wing, ball gains lift from low-pressure airflow over its top

The ball must spin around its axis; air passing over the football causes drag. If the ball wobbles, extra drag will slow it. The faster it is thrown, the lower the drag.

Lacing slows spin, causes drag and shifts the center of gravity

Spin axis intersects center of gravity

Airflow separation zone

Lift

Low pressure zone

Spin axis

10° angle of attack

Flight path

High pressure zone

Weight

For maximum distance, axis of a football should point 10° above its line of flight



Best control comes from holding the ball in the middle, near its center of gravity

Holding the ball at the rear allows a faster pass

If spin and angle are correct, the pass remains stable throughout its flight

A pass with a high trajectory and too large an angle of attack will wobble in the late stages of flight.

SOURCES: North Carolina State University; Popular Science