A SAFETY ANALYSIS

By Gary Selby

The Safety: One of football's rarest scoring plays. The Digest of Rules in the NFL's *Record and Fact Book* describes a safety as:

"Two points are scored for the opposing team when the ball is dead on or behind a team's own goal line if the impetus came from a player on that team."

Emphasis on impetus. A fairly straightforward definition. Most fans know a safety when they see one, despite there being numerous types. But when they happen, its like an electric shock. The responses range from "What? So what's the score now?" to "Better get another beer and some pretzels. This thing's getting complicated." But I wanted to look a little deeper. How many safeties have there been in the NFL? What are the types? What is their effect on a game? Can it be measured?

I had never seen an analysis of the safety, so I decided to do one myself. My interest was sparked while reviewing files for the PFRA's Linescore Project. In a 1965 Giants-Cardinals game I saw the following entry for an individual score: StL – Team Safety.

Team Safety? Huh? Did the entire Cardinals defense tackle Tucker Fredrickson in his end zone? After a trip to the library revealed the answer, I kept thinking about how devastating a safety can be. You give up possession, give your opponent 2 points, and then you have to punt the ball from your own 20, giving your opponent good, if not excellent, field position. Ouch! Safeties can swing momentum and decide games. They force coaches to reach for their pocket calculator. So what's a Team Safety? Later. First let's look at some numbers.

THE DATA SET: Using the aforementioned linescore files, I documented 853 regular season and 28 playoff safeties in the NFL, for a total of 881 from 1920 to 2003. These include all safeties from the AFL in the 1960s. The linescore files are great in that you can not only identify the teams, final scores and dates, but also the types of scores, the sequence of scores, the quarter in which the scores occurred, and most importantly the players who scored.

Now 881 safeties may sound like a lot, but considering that it took 11,610 regular season and 381 playoff games to produce them (those are my numbers and I'm sticking to them), a safety only happens every 13.61 games on average. In fact if you separate these, you get a number akin to pi in mathematics:

Games	Total	Safeties	Games per Safety
Regular Season	11,610	853	13.61
Playoff	381	28	13.61
Total Games	11,991	881	13.61

Like clockwork a safety occurs on average every 13.61 games, no matter the game situation. As Mr. Spock would say, "Fascinating".

Now setting the playoff safeties aside, I removed three groups of games from the set of 853: those with intentional safeties, those with multiple safeties, and those with a final score of 2-0. I refer to the remainder as single safety games.

THE INTENTIONAL SAFETY: What happens when a team *wants* to take a safety? These cunning moves of strategy happen when a coach decides its better to give up the 2 points in exchange for an advantage, usually field position late in the game. Of the 853 safeties, 39 were verified as intentional in single safety games and three more are found in multiple safety games, for a total of 42. Does the strategy work? Of the 42, 34 of the teams that gave up the safety won the game (81%). The 8 "backfires" are:

Date	Safety by	Opponent	Winner of Game
11/25/1926	Pottsville	Providence	Pottsville 8-0
10/ 9/1932	Green Bay	Portsmouth	Green Bay 15-10
11/11/1956	Washington	Detroit	Washington 18-17

9/21/1969 Washington	New Orleans	Washington 26-20
9/19/1993 Cleveland	LA Rams	Cleveland 19-16
9/ 8/1996 San Francisco	St. Louis	San Francisco 34-0
10/10/1999 Miami	Indianapolis	Miami 34-31
11/24/2003 Tampa Bay	NY Giants	Tampa Bay 19-13

According to the PFRA game summary, the Pottsville safety was more a result of frustration on the part of Providence getting the snot beat out of them rather than strategy. And the 49ers safety is clearly not a backfire (look at the final score), but Rams punter Sean Landeta did indeed intentionally kick the ball out of the end zone after a bad snap. Are these all of the intentional safeties? Probably not. But of those known, the strategy seems fairly effective at 81%.

MULTIPLE SAFETY GAMES: There have been 29 regular season games with at least two safeties. Of these, 10 had each team scoring a safety, 18 had one team scoring both safeties, and 1 had one team scoring 3 safeties (Los Angeles Rams vs New York Giants, Sep 30, 1984). Surely scoring two safeties would ensure victory, right? Not so! Three of the 18 lost. They are:

Date	Safety By	Opponent	Winner of Game
11/25/1923	Chicago Cards	Racine Legion	Racine 10-4
1 /2/1983	Denver	Seattle	Seattle 13-11
11/16/2003	Buffalo	Houston Texans	Houston 12-10

Its noteworthy that both of the second safeties scored by Chicago and Buffalo were intentional by Racine and Houston respectively, magnifying the uniqueness of the Denver-Seattle game. The Cardinals 4 points is a unique final score in NFL history. By the way, the Rams beat the Giants 33-12 in that triple safety game.

There are five games in which the first and the last score is a safety (this does not include games with 2-0 final scores; see below). They are:

Date	First safety	Second safety	Result of Game
11/25/1923	Chicago Cards	Chicago Cards	Racine Legion 10-4
10/26/1975	Oakland	Oakland	Oak 25-0 vs SD
10/29/1978	Miami	Baltimore	Miami 26-8
12/ 4/1994	Houston	Arizona	Arizona 30-12
11/16/2003	Buffalo	Buffalo	Houston 12-10

There are also five games with consecutive safeties. They are:

Date	Safeties by	Opponent	Result of Game
10/21/1973	LA Rams (2)	Green Bay	Los Angeles 24-7
9/30/1984	LA Rams (2)	NY Giants	Los Angeles 33-12
9/13/1987	New Orleans (2)	Cleveland	New Orleans 28-21
10 /3/1999	Jacksonville (2)	Pittsburgh	Jacksonville 17-3
10/ 5/2003	Dallas (2)	Arizona	Dallas 24-7

Of these the Saints win is notable. Tied at 21, New Orleans sacked Bernie Kosar twice in his own end zone, then added a Morten Andersen field goal for the 7-point win.

THE 2-0 GAMES: There are five such games in NFL history. Considering that the last one occurred over 65 years ago, the odds of this happening again seem remote. They are:

Date	Safety by	Opponent	Safety Type
11/29/1923	Akron	Buffalo	Blocked punt
11/21/1926	Kansas City	Buffalo	Tackle
11/29/1928	Frankford	Green Bay	Tackle
10/16/1932	Green Bay	Chicago Bears	Blocked punt
9/18/1938	Chicago Bears	Green Bay	Blocked punt

THE SINGLE SAFETY GAMES: Eliminating the 39 intentional safeties, the 2-0 games (5 safeties) and the multiple safety games (59 safeties) reduces the data set from 853 to 750 regular season safeties. Lets break these down by type:

Type	No.	(%)
Tackle	452	(60.3)
Blocked punt	107	(14.3)
Penalty	49	(6.5)
Player stepped out of end zone	42	(5.6)
Snap out of end zone	39	(5.2)
Fumble out of end zone	20	(2.7)
Fumble recovery in end zone	17	(2.3)
Goal post interference	5	(0.7)
Fumble punt snap	4	(0.5)
Pass blocked in end zone	4	(0.5)
Ball knocked out of end zone	2	(0.3)
Kickoff fumbled out of end zone	2	(0.3)
Miscellaneous	7	(0.9)

There are no big surprises here, with players tackled in the end zone, blocked punts and penalties leading the list. The penalties warrant discussion. There are 28 by intentional grounding, 17 by holding, and one each by clipping, tripping, an illegal block and an illegal forward lateral. The first ever was a holding call against the Dallas Cowboys when quarterback Eddie LeBaron fired a 99-yard touchdown pass to Frank Clarke against the Steelers on September 23, 1962, which would have tied an NFL record. The play wouldn't have stood as Clarke had stepped out of bounds, and the safety trumped everything.

The first intentional grounding safety was by Jim Zorn of the Seahawks in a 1980 Thanksgiving game against the Cowboys. The play was a "flea flicker", with a handoff to Lawrence McCutcheon, who tossed back to Zorn. With nobody open, Zorn threw the ball at the feet of guard Tom Lynch. Three quarterbacks have had two intentional grounding safeties: Joe Montana, Jeff George and Jim Harbaugh. Check out the impressive names for other 22:

Troy Aikman, Drew Bledsoe, Steve Bono, Bubby Brister, Matt Cavanaugh, Tim Couch, Trent Dilfer, Craig Erickson, Brett Favre, Rich Gannon, Jim Kelly, Bernie Kosar, Dave Krieg, Steve McNair, Rick Mirer, Neil O'Donnell, Jay Schroeder, Kordell Stewart, Vinny Testaverde, Mike Tomczak, Tom Tupa, Jim Zorn

Players stepping out of the end zone got me to thinking. Remember the previous discussion on intentional safeties? Perhaps more are here. Figuring that timing might be a factor, I decided to separate them by the quarter in which they occurred:

Quarter	1	2	3	4	Total
Number	2	5	8	27	42

Sixty-four percent occurred in the fourth quarter. And of those 27, 17 are the final score of the game. Does anyone smell intentional safety here? Clearly more research is needed.

Two other types are practically obsolete. The last pass blocked in the end zone was against the Lions Dave Ryan when the Cardinals 6-foot-6 linebacker Bill Blackburn swatted his pass away on October 13, 1946. The last goal post interference safety was against the Chargers Rick Redman, who's end zone punt struck the uprights and rolled out of bounds on December 4, 1966 against the Oilers. Now let's look at my favorites, the miscellaneous.

MISCELLANEOUS: I've seen these described as "rare", "bizarre", "unusual", and even "freak". Here is the unique list of 8, one of which occurs in a multiple safety game (Giants vs Maroons):

Date	Scoring team	Opponent
11/ 9/1924	Milwaukee	Minneapolis
	Tackle in end zone after interception	
11/25/1926	LA Buccaneers	Detroit
	Punt from end zone fails to cross goal	
10/30/1927	NY Giants	Pottsville
	Punter lined up out of end zone	
11/24/1927	Cleveland	NY Yankees
	Kickoff mistakenly downed in end zone	

10/ 4/1964 Detroit   NY Giants
    Missed field goal attempt fumbled into end zone
    and downed
10/25/1964 San Francisco   Minnesota
    Wrong way fumble return
11/21/1965 St. Louis   NY Giants
    Team Safety
 9/17/2000 Atlanta   Carolina
    Fumble recovery at 3-yard line and player ran out of
    end zone

Most are self-explanatory and result from either poor decisions or an odd miscue with the ball. Lets look at the last three in reverse order. In the Atlanta-Carolina game, the Falcons Jamal Anderson was headed for paydirt on a long run when the Panthers Doug Evans stripped the ball, recovered the fumble and then stepped into and out of the end zone. Ruled a safety, the Panthers protested. But the referees said, even after instant replay, that both of Evans feet were inbound before he stepped out. Therefore it was Evans' impetus (remember that word?) that caused the ball to enter and exit his own end zone.

Now for the Team Safety. The Giants middle linebacker Jerry Hillebrand had intercepted Cardinals backup quarterback Buddy Humphrey's pass at his 3-yard line. Hillebrand fumbled and the ball rolled back into the endzone. Hillebrand's alert teammate Dick Lynch downed it, thinking he had a touchback. But the officials ruled it a safety because the Giants were responsible for the ball being in their end zone. Again, impetus. Why not attribute the safety to Lynch or Hillebrand, versus a Team Safety? I can only surmise that any one of 22 players on the field had a chance to recover the fumble. When one of the Giants players recovered it, a team safety was ruled. I guess a Cardinals recovery would have been a touchdown?

Arguably the most famous safety in NFL history was turned it by the Vikings Jim Marshall in 1964. George Mira, the 49ers quarterback, had completed a pass to Billy Kilmer. While struggling with tacklers, Kilmer fumbled. Marshall scooped up the loose ball and galloped 66 yards the wrong way into his end zone, thinking he had scored a touchdown. Few fans recall that it was Marshall who had forced an earlier fumble that was returned for a touchdown by teammate and Hall of Famer Carl Eller, allowing the Vikings to beat the 49ers 27-22.

THE EFFECT: Using the Linescore Files, the only handy information to measure the effect of a safety was to see which team scored next. Logically it should be the team that scored the safety, and the numbers bear this out. For this I decided to use all 881 safeties. Why all 881? Because I felt like it. Seriously, my reasoning was that no matter when, where or why a safety happens, the immediate result is that the opponent free kicks from their 20 yard line.

Now of these I removed 204 safeties that were the last score of the game. I then removed 71 more safeties that were the last score in the second quarter of games because the second half kickoff truncates the flow of play between the safety and the next score. That leaves 606 next scores:

Type of Next Score	Number for Scoring Team	Number for Opponent
Field Goal	136	56
TD Pass	126	79
TD Run	111	54
Interception Return	9	7
Safety	5	0
Free Kick Return	4	0
Punt Return	3	1
Fumble Return	2	6
Blocked Punt	2	2
Fumble Recovery	1	2
TOTAL	399 (65.8%)	207 (34.2%)

So the teams scoring the safety have scored next 65.8% of the time, with field goals leading the list. Again not surprising, although I expected this percentage to be higher. A unique next-scoring type is the free kick returns immediately following the safety. There are only four, one of which was by the Titans in a playoff game:

Date	Scoring team	Free kick returner	Opponent
11/ 6/1977	Houston Oilers	Billy Johnson	Chicago Bears
11/ 2/1980	Minnesota Vikings	Keith Nord	Washington
1/23/2000	Tennessee Titans	Derrick Mason	Jacksonville
10/ 1/2000	Denver Broncos	Deltha O'Neal	New England

PLAYOFF SAFETIES: These 28 are all single safety games and they breakdown as follows,

Safety Type	Safety Type
Tackle – 16	Player Stepped out of End Zone - 1
Intentional – 6	Snap Kicked through End Zone - 1
Snap out of end zone – 2	Blocked Punt - 1
Goal Post Interference - 1	

Now if your favorite team takes a safety in a playoff game, no need to worry. So far all six have won their game. For prominent playoff safeties, I chose five.

One of the most important was the very first one. On December 16, 1945 the 9-1-0 Cleveland Rams hosted the 8-2-0 Washington Redskins for the NFL Championship. In the first quarter Redskins quarterback Sammy Baugh attempted a long pass from his end zone, but a blustery wind blew the ball into the goal post, knocking it into the end zone for a safety under the current rules. The two points enabled the Rams to defeat the Redskins 15-14 for their first NFL Championship. This was also the very last home game for the Rams in Cleveland.

In Super Bowl X (that's ten for you non-Romans), the wild card Dallas Cowboys held a 10-7 lead over the defending champion Pittsburgh Steelers entering the fourth quarter. Then a blocked punt by reserve Reggie Harrison gave Pittsburgh a safety, which opened the door to 12 additional Pittsburgh points and a 21-17 win. Most remember this game for the spectacular catches by Lynn Swann, but Cowboys coach Tom Landry said the safety was the turning point in the game.

Trailing 21-6 at halftime on January 8, 1995, the San Diego Chargers were facing a home playoff loss against Miami when defensive tackle Reuben Davis cornered Dolphins running back Bernie Parmalee for a safety. The Chargers tacked on two more touchdowns and shutout the Dolphins in the second half for a 22-21 win to advance to the AFC Championship game, and eventually to Super Bowl XXIX, ironically held at Joe Robbie Stadium in Miami.

The St. Louis Rams, with the NFL's highest scoring offense, hosted the Tampa Bay Buccaneers for the NFC Championship on January 23, 2000. But the Buccaneers third ranked defense made it a nip and tuck affair. Tied at 3, Tony Mayberry's Shotgun snap sailed over Buccaneers quarterback Shaun King's head in the second quarter. King batted the ball out of the end zone, giving the Rams a 5-3 lead. A field goal in the third gave Tampa Bay a 6-5 lead. But Kurt Warner fired a 30-yard touchdown pass to Ricky Proehl to forge ahead. The two-point conversion failed, resulting in a odd final score of 11-6. It was Proehl's first touchdown catch of the season. The Rams went on to win Super Bowl XXXIV as the Tennessee Titans came up a yard short on the final play.

The safety that could have decided a Super Bowl. The 1990 Buffalo Bills had used their No Huddle offense to roar through the playoffs, outscoring Miami 44-34 and blasting the Raiders 51-3 in the AFC Championship. In Super Bowl XXV they held a 10-3 lead over the New York Giants when Bruce Smith sacked Giants quarterback Jeff Hostetler for a safety. It seemed the Bills were off and running again. But the Giants pounded out two touchdowns for a 17-12 lead entering the fourth quarter. A Thurman Thomas touchdown run and a Chris Bahr field goal put the Giants lead at 20-19. With the safety, Buffalo had a chance to win as Scott Norwood lined up for his fateful field goal attempt with 8 seconds left. Without it, only a tie was possible. But Norwood… well, we know the dramatic ending all too well.

THE PLAYERS: On October 21, 1973 Fred Dryer set an NFL record with two safeties in a game, sacking both Green Bay quarterbacks Scott Hunter and Jim Del Gaizo in the fourth quarter of a 24-7 Rams victory. Dryer is among an elite group of 14 players with two safeties in a season. The Packers Tom Nash was the first in 1932. It would be 30 years later before the Lions Roger Brown equaled that mark.

Another Lion, Doug English, shares the NFL record of four career safeties with Hall of Famer Ted Hendricks, who recorded his fourth on a blocked punt against Seattle on Monday Night Football, November 17, 1980.

The first player with three career safeties was Bill McPeak of the Pittsburgh Steelers, whose third was a sack of Hall of Famer Johnny Unitas on November 3, 1957. McPeak is joined by 16 others with three:

Charlie Krueger, Ernie Stautner, Jim Katcavage, Roger Brown, Bruce Maher, Ron McDole, Alan Page, Lyle Alzado, Rulon Jones, Steve McMichael, Kevin Greene, Burt Grossman, Eric Swann, Dan Saleaumua, Derrick Thomas, Bryant Young

SAFETY TRIVIA: The first NFL safety was recorded by Akron Pros end Scotty Bierce on October 10, 1920 when he tackled Frank Nesser of the Columbus Panhandles at League Park in Akron, OH. The Pros won 37-0 en route to the NFL's first championship.

The Boston Patriots are the only AFL team of the 1960's who did not have a safety scored against them.

The first safety in Super Bowl history occurred on January 12, 1975 when Minnesota Vikings quarterback Fran Tarkenton covered a botched handoff in the endzone against the Pittsburgh Steelers in Super Bowl IX. The Steelers went on to defeat the Vikings 16-6, giving owner Art Rooney his first of four Super Bowl wins.

The only overtime game decided by a safety occurred on November 5, 1989. The Vikings Mike Merriweather blocked a punt out of the end zone to defeat the Los Angeles Rams 23-21. The Vikings 21 points in regulation came from seven field goals from Rich Karlis, tying an NFL record held by the Cardinals Jim Bakkan.