

Brian

WR 13100

Professor Clauss

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### Goal?

Situation: As a current collegiate goalkeeper at the University of Notre Dame, I am affected by the recent debate within the Federation Internationale de Football Association (FIFA), which is the standard for the rules of soccer associations around the world, over the use of goal-line technology in the game of soccer. Due to my numerous experiences in instances of whether the ball completely crossed the goal-line for a goal or not, I am in favor of the use of goal-line technology to prevent such controversies. I am writing this argument as a letter to administrators and leaders within the FIFA organization, and my ultimate goal is to persuade them to institute goal-line technology in soccer as soon as possible.

Dear members of the Federation Internationale de Football Association,

My name is Brian ---- and I am currently a goalkeeper on the Men's Soccer team at the University of Notre Dame in South Bend, Indiana. Please excuse my use of the word "soccer" in place of "football" in reference to the sport. The United States has not yet caught up to the rest of the world in regards to terminology of this beautiful game. The purpose of my letter is to address the recent debate over the use of goal-line technology in the game of soccer. The idea of goal-line technology within soccer has been discussed for many years now. However, after recent controversies in matches on the world scale, the calling for a change in the laws of the game regarding the use of technology in soccer has gained strength. As the most powerful soccer association in the world, I am sure that you are also aware of the demands brought about by players, coaches, and fans around the world. I applaud the advancements that you have made in the last half-decade in terms of technology. Your 2006 institution of headsets and microphones that allow center officials and their assistant officials to communicate throughout the game has moved soccer in a positive direction and is a tremendous starting point for future advancements

(“VOK-REF”). However, there is so much more that we, as soccer enthusiasts, can do to improve the sport that we so love. I am certain that you, like I, will do whatever it takes to make this game as just as possible. Goal-line technology is the tool that will lead to this justice. The technology options that are now available must be utilized. Your remarkable work for the advancement of soccer in the past leaves me confident that you will institute goal-line technology for all of professional soccer leagues around the world. By this example, lower level organizations, such as the NCAA in the United States where I play, will do the same. The FIFA organization can improve the game of soccer for the entire world.

In order to solve a problem, one must first fully understand the problem they are trying to solve. Therefore, we must first look at the current rules under FIFA concerning the goal-line and the true nature of a goal. According to your most recent rulebook, which is used as a standard for almost all levels and organizations of soccer around the world, “a goal is scored when the whole of the ball passes over the goal line, between the goalposts and under the crossbar, provided that no infringement of the Laws of the Game has been committed previously by the team scoring the goal” (“Law”). In short, in order for a goal to be scored, the entire ball must be fully across the entire goal-line. One may believe that this rule is clear, which it is. However, this clear rule is not always carried out in accordance to the FIFA rulebook. This is where the problem lies. It is not always obvious to an official if the entire ball has crossed the entire goal-line. Often, the ball will be kicked off the goal-line by a defender or the ball will deflect off the top of the goal straight down into the goal. These are just a few examples of the countless plays that can occur near the goal-line at the blink of an eye. In fact, according to a recent study by James Watkins, a professor of Sports Science at Swansea University in the United Kingdom, the average velocity of a shot by a professional player is 65 miles per hour (Parrish). This speed of a shot by a

professional player makes it nearly impossible for an official to see both the ball and the goal-line with 100% clarity. The officials of soccer games are human, and thus make human errors. Therefore, some goals are ruled non-goals, and some non-goals are ruled goals. The rule is clear, but the rule is not always carried out.

In recent years, we have witnessed injustice in regards to goal-line situations at the highest level of the game. On June 26<sup>th</sup>, 2010, Germany faced England in the round of 16 in the World Cup in South Africa. In the 37<sup>th</sup> minute of the match, with Germany leading 2-1, England's Frank Lampard lobbed a shot over German goalkeeper Manuel Neuer's head. The ball struck the bottom of the cross-bar and bounced straight down into the goal, clearly over the goal-line. Due to the trajectory of the ball, it immediately bounced out of the goal. Regardless of where the ball ended up, the entire ball unmistakably crossed the entire goal-line. England was rewarded a goal right? Unfortunately for Frank Lampard, his teammates, and the entire country of England, they were not. Uruguayan referee Jorge Larrionda and his assistant referees ruled that the ball never crossed the goal-line. England lost the game 4-1 and they were eliminated from the World Cup (Hughes). Although Germany won by more than one goal, no one will ever know how the game would have finished if England would have tied the game at 2-2. This is just one example of the many recent controversies over goal-line situations that have plagued the game of soccer.

One may find himself blaming the officials in a situation like this. They didn't carry out the rule of a goal that is clearly defined in the FIFA rulebook. However, if you look deeply into the requirements of the referee, you will see determining goals is not as easy as it seems. If you were to read the FIFA rulebook, you would be able to learn about the correct positioning of an assistant official. According to your current rules, the assistant referee must always be in a direct

line with the second-to-last defender of the team without the ball. It is also the requirement of the assistant referee to be in direct line with the goal-line when a goal is scored in order to give confirmation to the head official that the entire ball crossed the entire goal-line (FIFA *Law 6*). As I explained previously, this is the true definition of a goal. With this knowledge, let us next describe a hypothetical, but realistic situation that occurs very often during a game. If an offensive player is shooting the ball towards the goal from 20 yards away, the second-to-last defender will most likely be within one or two yards of that offensive player. Therefore, if the assistant referee is properly in position with the second-to-last defender according to your current rules, he or she will be 18 or 19 yards away from the goal-line. As previously stated, the average velocity of a shot from a professional soccer player is 65 miles per hour. Since the assistant referee is required, by rule, to be in a direct line with the goal-line to confirm that that entire ball crossed it, the referee must travel at least as fast as the ball in order to make it to the goal-line on time. Hence, the assistant referee must travel at least 65 miles per hour in order to be in the position that your current rules require. The fastest man in the world, Jamaican sprinter Usain Bolt, runs at a top speed of 27.79 miles per hour (Atkins). My point is simple. Your current rules make it is unrealistic to expect an assistant referee to be in proper position when a shot on the goal is taken, and also expect him to be in a direct line with the goal-line to clearly determine if the entire ball crosses the entire goal-line for a goal to be awarded. There is an easy solution to this impossibility: remove this burden from the responsibilities of an assistant referee. One way to do this is with the institution of goal-line technology.

Now that I have established why there is a need for a change in the current FIFA rules regarding the goal-line, I will now argue why the use of technology is the best alternative. In order to do this, I must first explain the different options of goal-line technology that are

currently ready to be implemented into soccer. The first option that is presented is the “smartball.” In this technology, the soccer ball is equipped with a computer chip which corresponds with “a network of receivers around the field designed to track the ball's precise position in real time - including exactly when it has fully passed the goal line.” The chip and corresponding network communicate with one another to precisely locate the ball in reference to the player parameters (“Football Technology”). Therefore, the officials will know with certainty whether or not the ball fully crossed the goal-line and whether a goal should be rewarded.

One may argue that the use of technology in soccer will slow the game down, for the game will have to be temporarily stopped by the official in order to check the machinery to determine a goal. For many against the idea of using technology in soccer, this is their major objection. The game of soccer is meant to be continuous, with no stoppages in play. To many, using technology will harm the nature of the game. However, this concern is not warranted for the “smartball.” German companies Cairos Technologies and the Fraunhofer Institute for Integrated Circuits, an engineering research and software development company, along with the help of Adidas athletic clothing and shoe company, have created a way in which a signal that the ball crossed the line for a goal will be sent to a watch-like device worn by the official in less than one second (“Football Technology”). Therefore, the official will immediately know whether a goal should be rewarded and the game can continue with no stoppage of play. If the “smartball” is implemented into soccer, there will be no stoppage in play and there will be no question to whether the ball crossed the line for a goal. Therefore, no future controversies, similar to the one that occurred during the 2010 England-Germany match, will arise.

The second option of technology that has been proposed is “Hawkeye.” In this method, a system of three cameras is focused on each goal-line, and each can take footage at 600 frames-

per second. If the ball crosses the line, the cameras will send an auditory beep to the central official within half a second. Hence, the game will not be unnecessarily stopped. As stated previously, you instituted headphones for all officials in 2006. Therefore, the signal can easily be relayed to the officials through these headphones using the “Hawkeye” technology. In fact, this method has already been used to make calls in professional tennis matches around the world (“Football Technology”).

Before I proceed any further in discussing changes to your current rules regarding goal-line technology, I would first like to applaud you on your efforts to solve this problem that our sport currently has. You have not ignored the cries for a better method for determining goals in controversial situations. For instance, in 2008, you experimented in U19 professional games by adding an extra official at each goal-line. Therefore, that official will always be in better position to determine whether a goal should be rewarded. You saw positive progress with this method and implemented it for the UEFA EURO 2012 tournament (Chaplin). This is a step in the right direction and it leaves me confident in your desire to fix the problem. Although this method does improve the ability of officials to view the goal-line with more clarity, the use of technology is still a superior option.

Firstly, by adding another official, you are increasing the cost of officiating by 25%, for you will have to pay an additional official for every match. This is an unnecessary increase in FIFA spending. Conversely, one may say that this will still be cheaper than expensive technology. I do not argue that implementing technology into soccer will increase spending too. However, according to the FIFA rulebook regarding goal-line technology and its testing, much of the cost will be covered by the supplier of the technology (FIFA *Goal-line*). Both methods raise the cost for the officiating of a soccer game. However, only in the use of technology will a

considerable amount of the cost be paid for. Therefore, from a financial standpoint, goal-line technology is more beneficial than your recent attempt to solve the problem by using an extra official.

Secondly, by adding another official, you are adding another human that is capable of human error. Although this additional official is in a better position to see the goal-line more clearly, the ball still moves at a speed that is difficult for the human eye to see with 100% certainty. When a goal is decided based on inches, the human eye is not a reliable source of judgment, as seen continually in mistakes made by human officials. Chelsea FC and Czech Republic goalkeeper Petr Cech, who is in favor of goal-line technology, stated, “But I have been saying bring in technology for 10 years. Every time in the big competitions you see a goal which is not allowed when it is a goal or vice versa. You are sitting at home in front of the tele and in 10 seconds you can tell if it is a goal, so you think, ‘Why can’t the officials be told if it is a goal or not’” (“Petr”). Although technology cannot prevent all error in the officiating of soccer, it can eliminate the human error in regards to determining goals. The technology’s “sight” cannot be affected by distractions such as rain or fog, unlike the human official’s sight. With the institution of goal-line technology, determining goals is no longer a subjective manner for officials. Whether a goal has been scored will become black and white.

Those who question goal-line technology may think to themselves, “How are we sure that goal-line technology is accurate?” The response to this uncertainty lies within FIFA’s testing. In order for goal-line technology to be approved and instituted by FIFA, it must first pass an extensive list of tests and phases. For example, according to your current rules regarding the testing of any proposed technology, “100% of free shots on goal (or “no goal” for near misses or shots into side-netting) must be correctly recognized (FIFA *Goal-line*). We can see from these

requirements listed in the FIFA rulebook that during testing, 100% of shots that enter the goal without infringement must be detected in order for the technology to be implemented. One may inquire about instances where the ball is kicked off the line by a defender. For this situation, FIFA sets up a test in which a wall is placed directly behind the goal-line in a way that when the ball meets it, the ball is barley across the entire goal-line. After crossing the goal-line, it bounces out of the goal. For these situations, FIFA states, “Shots against impact wall: 90% of all goal situations must be displayed correctly within a tolerance of -3/+5cm of the goal line” (FIFA *Goal-line*). From this we can see that the technology proposed must be 90% accurate in instances where the ball is quickly removed from the goal after already crossing the entire line. In order for a new goal-line technology to be placed in the game of soccer by FIFA, it must first pass all of these rigorous tests, along with many others. If the technology does pass, we are sure of its effectiveness. Therefore, doubts about the accuracy of the technology that may be implemented are not warranted. If any technology is instituted into the game, we will be certain of its accuracy.

The use of goal-line technology in soccer is almost as controversial as the situations that its absence causes. Some people around the world think FIFA rules should stay the same and additional technology should not be implemented into the game of soccer because it will ruin the continuous flow of the game. On the other hand, some people around the world, like me, believe that goal-line technology must be instituted into soccer, or “Football,” as soon as possible because it will eliminate any future mistakes by human officials regarding goals. However, there is only opinion on this debate that matters, and it belongs to you. You are the most powerful leaders in the soccer world, and I am confident that you will pursue any opportunity to improve the game to which you are so dedicated. You are now presented with one of these opportunities.



Goal-line technology is a tool that can only improve a faulty system of goal determinism. Not only will it remove burdens of uncertainty for officials, who are often blamed for wrong calls, its ability to accurately distinguish between goal and non-goal will eliminate any future controversy. We both wish make the sport we so love just, and goal-line technology is a step towards justice.

Sincerely,

Brian ----

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