

# The difficulties in judging offside - empirical data is in -

## from the Football Association, London England

*edited by Ed Rae, SDI*

Assistant referees, in the European Pro leagues, always used letters on advertising boards or objects in the crowd, on the opposite side of the pitch. They have done so, to position themselves when judging offside. These types of reference points are unreliable. Furthermore, the assistant referee can not be sure if positioned directly opposite a chosen reference point. (Obviously players are moving in dynamic play, creating more distractions.)

Scientific research: limitations in the human eye, make it impossible to determine accurate angles, over such (soccer field) distances. Law 11: A player is in an offside position: if nearer to an opponents' goal line than the ball, unless there are two defenders, even or closer to their goal line; the infraction is judged when the ball is passed, by a team mate (in the attacking half). They are penalized, when they become actively involved, from that offside position.

This all appears quite straightforward. For years the football authorities have assumed, that assistant referees are able to make such judgements accurately.

The assistant referee can only attempt to do so... by positioning himself perfectly at a 90-degree angle to the relevant defender. (usually 2nd last) From this position, one must observe the attacker, at the precise moment the ball is released.

..."Analyses of 200 international games... experiments with professional Dutch assistant referees, have shown... limitations in the human perceptual system.... assistant referees rarely are able to position themselves exactly on the line, with that defender. ... the angle that is created between the point of observation, the defender, and the attacker, creates a false image on the retina of the assistant referee... many situations being erroneously judged..."

## New offside technology launched

A revolutionary new system that will help assistant referees to make offside decisions was unveiled at the Football Association's Soho Square in London.

The system consists of a series of prismatic lights that are visible only to the assistant referee when he or she is positioned directly opposite the light itself. The lights give the assistant referee a perpendicular guide, to aid their positioning. Tests in Norway (the country where the new system was designed) have shown that the system can reduce errors in offside decisions, by as much as 50%.

At a press conference John Baker, The Football Association's Head of Refereeing, former Arsenal and England full-back, Kenny Sansom and Thomas Donsig, Managing Director of the Norwegian company Reference Point System, were presiding. They answered questions about (new technology)... could improve the decision-making ability, of assistant referees.

Donsig revealed that the system had taken four years to develop and believes that it represents a "significant technological solution to one of the traditional problem areas of football."

He added: "We clearly understand how difficult the offside decisions are for the assistant referees. This system will help them get into the right position. But of course once they are in position, the decision then becomes entirely theirs. That has always been the case."

The vastly experienced Sansom, who won an impressive 86 caps for England at left-back, has also thrown his weight behind the project, saying: "It's a marvelous system. It's not just about (the officials)... it's about the whole of football. Positioning is vital in all sports. That's why I think the system can work."

John Baker, saw the system in Norwegian action before agreeing to its pioneering trials in England. He explained how the technology is to be assessed.:

"We had to be sure that it did not interfere with the laws of the game before we could move forward," stated the F.A.'s Head of Refereeing. "We certainly believe that this is the case as the system is simply an aid for assistant referees, to get their alignment correct. It will mean that they are always able to see a perpendicular line, across the field of play."

"We are conducting trials at both Keele University and at Charlton Athletic's training ground....to help us determine how useful the system could be. A system is only as good as the help it provides."

"The system is not going to make the decision for the assistant referee - it will give a reference point. We have an open mind about it. We are looking forward to seeing how helpful it could prove to be."

Should the system prove successful, discussions will then begin with the F.A. Premier League and the Football League, regarding the potential for its full-scale introduction to English football.