THE REGINALD DENKE FOUNDATION
AND ACADEMY OF LEARNING

Attitude, Aptitude and Application

Report on the
THR ANOMALY OF THE 'KICK' IN THE SPORT OF SNOOKER

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December 2010

PROBLEM – The'Kick' in snooker

The 'Kick' is one of the great phenomena of snooker. The kick is where either the cue ball or the object ball literally jumps in the air slightly after receiving contact from the cue or the cue ball respectively. The effect is nearly always negative for the striker, as the angle on either ball is disturbed and contact is rarely clean. Many attempts have been made to explain why kicks occur, the most frequent explanations being friction from the table surface and, more commonly, a bit of dust or chalk on either ball when there is contact.

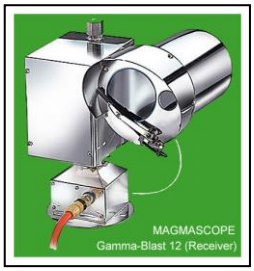
REASON for Research

To find the cause and eliminate the effect of this anomaly would enhance the game of snooker. It would produce a 'level playing field' for the sport and its competitors. No longer would a game be subjected to 'spurious misses'. In this day-and-age of supposed *match fixing*, it would deny the offender the excuse for an obvious miss' and limit their chances of 'throwing a match'.

RESEARCH Method

Using our *Magmascope Gamma-Blast Absorption Apparatus* in conjunction with an ultra high shutter-speed camera, we were able to witness and capture the precise moment that the Kick occured.

The Magmascope was a Swedish *Gamma-Blast 12* modification. The transmitter and receiver were configured either side of the 'collision sector' 5.20 metres apart.



Using spectrographic, electromagnetic (full-spectrum) images, it was possible to reproduce the event in a recorded data-stream in both digital image form and film footage. The event produced a 'temporal air distortion' which was captured perfectly by the Magmescope receiver and by the camera using frame speeds of 2,000 fps (see *Results* page)

The camera captured the event at 7000 frames per second (fps) at mega pixel resolution, directly through the lens funnel capability on the rear of the Magmascope. (see results page).

SNOOKER EQUIPMENT

The snooker equipment used in our experiment was a standard full-size match-play apparatus, similar to that used on televised UK tournaments. The table was sited in such a way that it was subjected to similar lighting, heating and atmospheric conditions that would be witnessed in a live event. The conditions also included a large group of assembled students of the Academy that mimicked the heat, sound and humidity-signature of a 'live audience'.

There were a total of 6 semi-professional players who were each issued with standard ash cues which were chalked in the traditional way using standard blue pigmented match-play chalk.

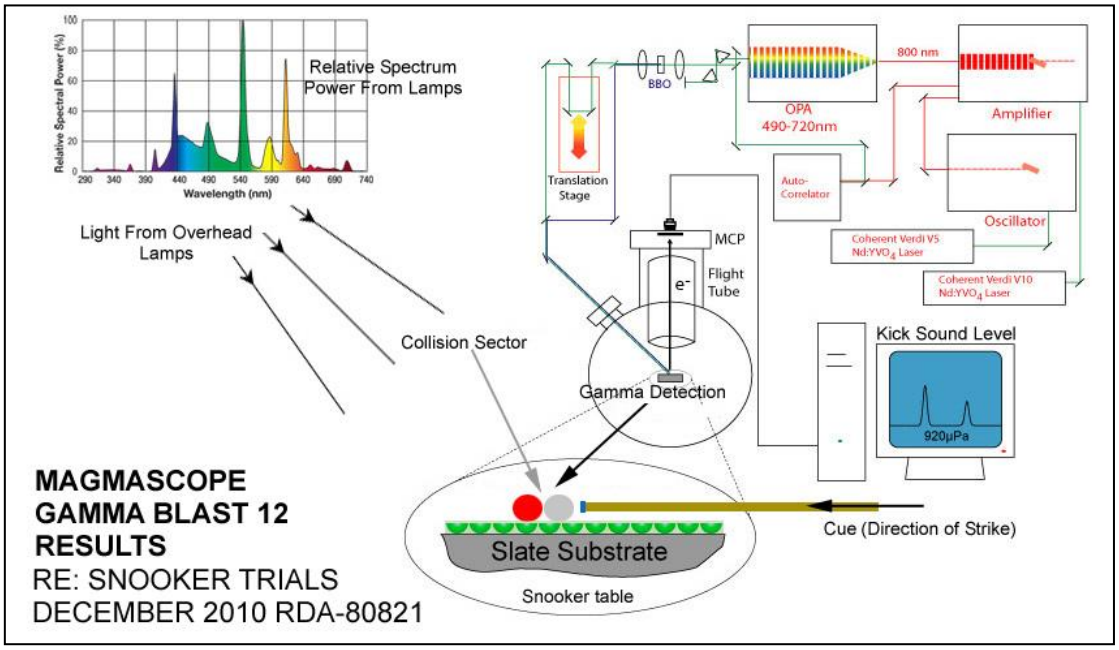
The frames were planned to be played continuously within 4 shifts over a 48 hour period. The shifts were going to be 6 hours long and would be played with a morning/lunchtime session from 09:00 to 15:00hrs and an evening session from 17:00 to 23:00hrs.

The experiment would end when we had captured the first true 'kick' that registered 300 – 800+ µPa from the microphone device mounted 2 metres directly above the table.

RESULTS

The first 'kick' to register over 300µPa (actually 920µPa) occurred in the second shift at 18:36 hours on the Thursday 16th December, a fantastic day for all those who witnessed the great event.

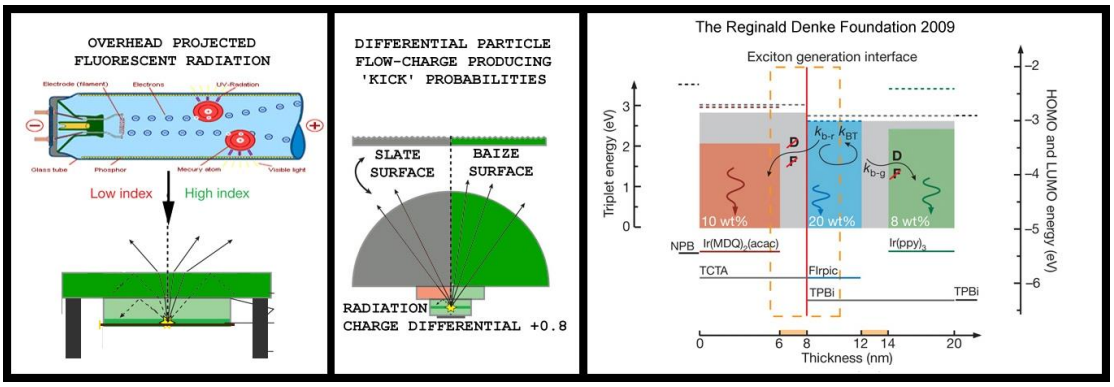
RESULTS (continued)



CONCLUSIONS

Positively charged ions of free-phosphor-radiation radiating from overhead fluorescent lighting tubes strike the snooker table surface and produce a static charge with the baize. The slate bed is also 'charged' from radiation from spot-lights and friction from the subtle slide-movement of the baize over the slate surface. This is caused by thermal and atmospheric fluctuations (Read: 'Snooker Dynamics and Lighting Principles' by Den Keger) and also by the transit of the snooker balls across the cloth. Both these charges can co-exist in a state of harmonic flux. When this 'flux' is disturbed by a shock-wave which is at the same frequency of the ionic vibration at the baize/slate interface, then a sonic ripple occurs ~ what we now refer to as a 'Kick'.

However, because the flux is disturbed by a shock-wave at the same frequency of the ionic vibration, this actually produces a neutral-flux, e.g. 'nothing'.



The Reginald Denke Foundation have been at the forefront of snooker technology for many years. Our important research into the 'snooker kick' problem has led us to develop the worlds first Anti-Kick Chalk. The name of our chalk is Cuebik.

Our chalk does not actually stop the kick occurring, it has microscopic e.v.a. spheres that act as minute shock-absorbers within the matrix of the chalk.