

frauds" corner of history's trash heap. The BMT bullets will join them before long.

At the end of the article, Roos implied that all of the "distinguished evaluators" who saw the demonstration were "impressed." If so, that is a very sad commentary on their competence in bullet testing – and indicates a serious need for training in wound ballistics for those whose jobs deal with the use of lethal force.

The lesson here is very simple: those who use clay as a "test" medium to demonstrate bullet effects are purveyors of nonsense. Whether they are frauds or just stupid really needn't concern us – the effect is the same in either case. Such nonsense needs to be exposed to protect the firearm illiterate. I believe that those who have the knowledge to expose such nonsense have a duty to do so. Yes, it is distasteful to speak out against such things. It is easy to say nothing – this is one reason that the US is becoming a paradise for frauds. Their chances of being exposed are very small when knowledgeable people remain silent.

### **TOM WILSON AND HIS MAGIC CAMERA**

By Martin L. Fackler, MD

On 28 Sept 01, from 9 to 10 PM on the History Channel, I saw a presentation entitled "Men Who Killed Kennedy." Tom Wilson, his digital camera, and his smoke-and-mirrors software were featured.

I ran across Wilson in 1993, when he was hired by a plaintiff's attorney to prove that an extremely obvious exit wound in the back of the chest was, in fact, an entrance wound (in the case of Hinkle vs. City of Clarksburg, WV). This is how it works. Wilson photographs the photographic print of a gunshot wound with his black-and-white digital camera. He then loads the file into his software program that modifies the presentation of the wound to give a three dimensional view. The third dimension is furnished by giving each pixel a value equivalent to its shade of gray in the digital photo. Wilson explains that the human eye can only distinguish, as I recall, only 16 shades of gray. But his camera can distinguish 256 shades. Because of this, he explains, he can discover things with his digital camera and appropriate software that are not possible to determine with the naked eye.

He claims he can use this method to determine whether a given wound is an entrance or an exit. This is a technology most welcome to plaintiff's lawyers. They are usually quite interested in technology that could show shots in the back of the torso to be entrance wounds – as in the Clarksburg case. I have a videotape of Wilson's deposition, in which he shows the three-dimensional depiction of the wound (which somewhat resembles a topographic map). He then explains that the height of each pixel is dependent on its shade of gray: the darker the shade the higher the spike. Then comes his interpretation: the relative position of the spikes shows "energy going into the wound," which proves it is an entrance; or "energy coming out of the wound," which proves it is an exit.

During the deposition, the defense lawyer pointed out the obvious inconsistencies. 1) The photographs, which Wilson interprets, were taken well after the wound was produced, and the only time anything was going in or coming out of the wound was during the millisecond during which the bullet was passing the skin. 2) Wilson presented no evidence that the shade of the pixel had anything to do with energy. 3) Wilson could point to no literature supporting his thesis. 4) Wilson could not relate his thesis to the laws of physics regarding how energy could appear as a shade of gray, etc.

The defense won the Hinkel vs. Clarksburg case, so I guess Wilson did no harm.

In the more recent History Channel program, Wilson had graduated to a color digital camera. This time he digitized the photographs of JFK's head and "analyzed" them with his software by "peeling off layers." Looking under the layers he "peeled off," he claims to be able to tell that the government had altered the photographs and that JFK really had a large wound in the back of his head, rather than in the front as all the evidence shows.

It is obvious that Wilson's "peeling off of layers" violates objective reality as much as his previous "energy in – energy out" thesis. Was he on TV because somebody took his theories seriously? Or was it because the JFK conspiracy theorists have become an entertainment cult, which nobody takes seriously; but listens to them for humor – actually lampooning them because their theses are fallacious to the point of comedy?

Even if nobody takes his JFK conspiracy theories seriously, I think it worth pointing out Wilson's talents with dazzling software. He might befuddle a gullible jury into an unjust award if there is no opposing expert who understands gunshot wounds or science.