Bruno At Cleon's Corner

Presented by *Optimal Livestock Services, LLC*

Bruno On RFID

After marking my territory on a number of outfits I landed with this group called Optimal Livestock Services. Come to find out they have done some amazing work on how RFID can be used in the sheep industry. To do some proper canine tracking I went on the Canine Boogle net work to find out the history on this technology. It's generally said that the roots of radio frequency identification technology can be traced back to World War II. The Germans, Japanese, Americans and British were all using this thing called radar— which had been discovered in 1935 by Scottish physicist Sir Robert Alexander Watson-Watt—to warn of approaching planes while they were still miles away. The problem was there was no way to identify which planes belonged to the enemy and which were a country's own pilots returning from a mission. The Germans discovered that if pilots rolled their planes as they returned to base, it would change the radio signal reflected back. This crude method alerted the radar crew on the ground that these were German planes and not allied aircraft (this is essentially the first passive RFID system).

It seems there was this place at Los Alamos, New Mexico that had a lot of scientists that developed the atomic bomb. Atomic bombs lost favor because they were dirty. Personally I didn't like the smell of them either. The Agriculture Department saw a need to keep these scientists employed so they requested them to develop a passive RFID tag to track cows. They figured that they could use this technology to keep track of medicines and withdrawal times so bad drugs would not get into milk used for human consumption. Los Alamos came up with a passive RFID system that used ultra-high-frequency (UHF) radio waves. These UHF radio waves had some problem they called backscatter. To a dog this is a bit confusing. Some companies went to the drawing board and developed a low-frequency system (125 kHz) system. This evidently was better and they put this in a tiny glass cylinder so it could be put under the skin or in a tag.

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