

## **Do Laws Adequately Address Cyber-Threats to Today's Computerized Cars?**

Today's cars are computers on wheels, open to hackers who can infect cars with malware and take control of a car's speed, braking, and other vital systems. Whether today's laws are applicable to these cyber-threats was the focus of a presentation to the American Bar Association's Cyberspace Law Institute by Richard C. and Cheryl Dancey Balough.

"The Day the Cars Stood Still: 1951 Sci-Fi or 2013 Reality?" gave an overview of the computer technology in today's cars, the emergence of vehicle-to-vehicle communications, and the self-driving cars of the future.

Ms. Balough noted that over 70 electronic control units are embedded in today's cars. All are interconnected, so if a hacker is able to gain access to any control unit, he can take over all of the car's vital operations. A person can achieve unauthorized access to the control units by various channels, such as the car's OBD-II port, the car's entertainment system, and even the tire pressure control monitor. As Mr. Balough told the group, this unauthorized access is not theoretical but has been demonstrated by university computer scientists who were able to hack into cars and take over all of their electronic systems.

As cars become more connected to the internet and more connected to each other through vehicle-to-vehicle communications, the potential for hacking increases, Mr. Balough said. Hackers may not only be individuals or groups, but could be other nations or terrorists who launch a Stuxnet type of attack on fleets of vehicles.

The Baloughs reviewed the adequacy of current laws to address these issues. These laws include the Computer Fraud and Abuse Act, the Wiretap Act, the Patriot Act, state eavesdropping statutes, and trespass to chattel.

One consequence of making cars computers on wheels may be to open a new business opportunity: creating antivirus and anti-spyware for cars. "In the future, before you drive your car, you may need to update your anti-virus software and scan your car for viruses," the Baloughs observed.

Chicago-based Balough Law Offices, LLC focuses on technology and privacy issues. A copy of the slides used in the presentation is available at [http://www.balough.com/uploadedFiles/Cyberspace%20Institute%202013%20Handout\(2\).pdf](http://www.balough.com/uploadedFiles/Cyberspace%20Institute%202013%20Handout(2).pdf).