



AUTONOMOUS TRUCKSPOTTING

In the near future, you will see your first autonomous truck driving down the highway by itself. And that moment will likely bring a whole host of thoughts, concerns and emotions to mind.

I've noted several times over the years that my grandparents, born at the very end of the 19th Century, could recount exactly what they were doing the first time they ever beheld an airplane in flight.

Seeing your first autonomous truck operating all alone "in the wild," probably won't rate quite as high as seeing an airplane for the first time on the historic scale, but in a time of unceasing technological advances, it will be a memorable moment nonetheless and mark a new era for both transportation and logistics. And as such, it's certainly an event that's worth considering and even preparing for, inasmuch as that is possible.

On the day of this momentous encounter, it seems likely you'll be behind the steering wheel of your own car or truck — and, more than likely, you'll still be actually driving that vehicle down the road, as opposed to being under autonomous control yourself. And, the autonomous truck in question probably won't appear all that different from trucks on the road today.

While later, clean-sheet autonomous truck designs will likely be radically different from trucks on the road today, as I discussed in this [earlier NACFE blog](#), the first generation of autonomous trucks will probably be hybrid designs, capable of both full human, or autonomous control, depending on the fleet's preferences or operational requirements.

At the same time, it also seems quite likely that the Federal Motor Carrier Safety Administration will require some kind of recognition system — a new lighting scheme seems like the most logical approach — to alert drivers and safety personnel that a truck is under autonomous control as its going down the highway. That will probably be your first clue that the truck you're overtaking in the right lane is something new, different, and transformational.

At this point, I can't help but think back almost 30 years ago, when as a young journalist starting on a magazine serving the North American construction industry, I was first exposed to autonomous vehicle technology. This was in the late 1990s, and Caterpillar, Volvo and Komatsu were experimenting with

crude versions of autonomous control systems based on then-brand-new global positioning satellite (GPS) and laser-guidance technology for massive mining trucks operating in remote quarries.

Even then, the technology was exciting and showed incredible promise (although I must confess that the idea that this technology would one day be used to guide Class 8 trucks — or even passenger cars — never crossed my mind). Watching the big mining trucks go through their robotic paces, I asked a Komatsu engineer about the potential for this technology on other machines. And his answer has always stuck with me: "We could run it on almost any machine we make today," he told me. "But the problem is that the public just isn't ready to look over from inside their car and see a dozer, without an operator in the seat, going back and forth, cutting the grade on a site preparation job. The local police would be swamped with alarmed phone calls."

“It's easy to see, that over the long run, autonomous vehicle technology — particularly on commercial vehicles — has the potential to be as transformative for our society and planet as air travel was.

We're a little better educated about the potential for autonomous vehicles today, of course. But there is also some obvious trepidation in the general public about the safety and reliability of these systems — particularly when it comes to Class 8 trucks. So, given those realities, your first instinct might well be to put as much space as possible between your vehicle and the autonomous truck — just in case something goes wrong.