

Telematics/Remote Monitoring: One Year Later

*User Applications & Asset Visibility
with a View to the Future*



MARTS
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Chicago, IL

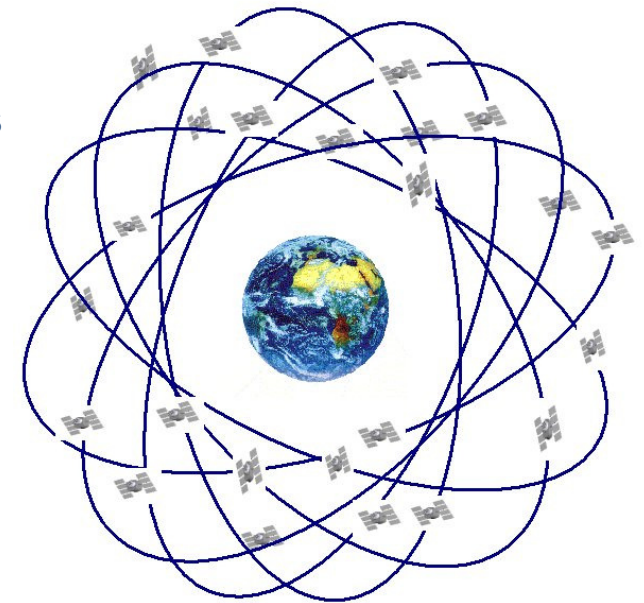
What is telematics?

- Blending of two technologies: Wireless Telecommunications and computers (or Informatics)
- Used extensively to describe the technology for communicating sensor readings from remote vehicles
- Information communicated includes current status from sensors or metrics used to predict future performance defined as Condition Monitoring.

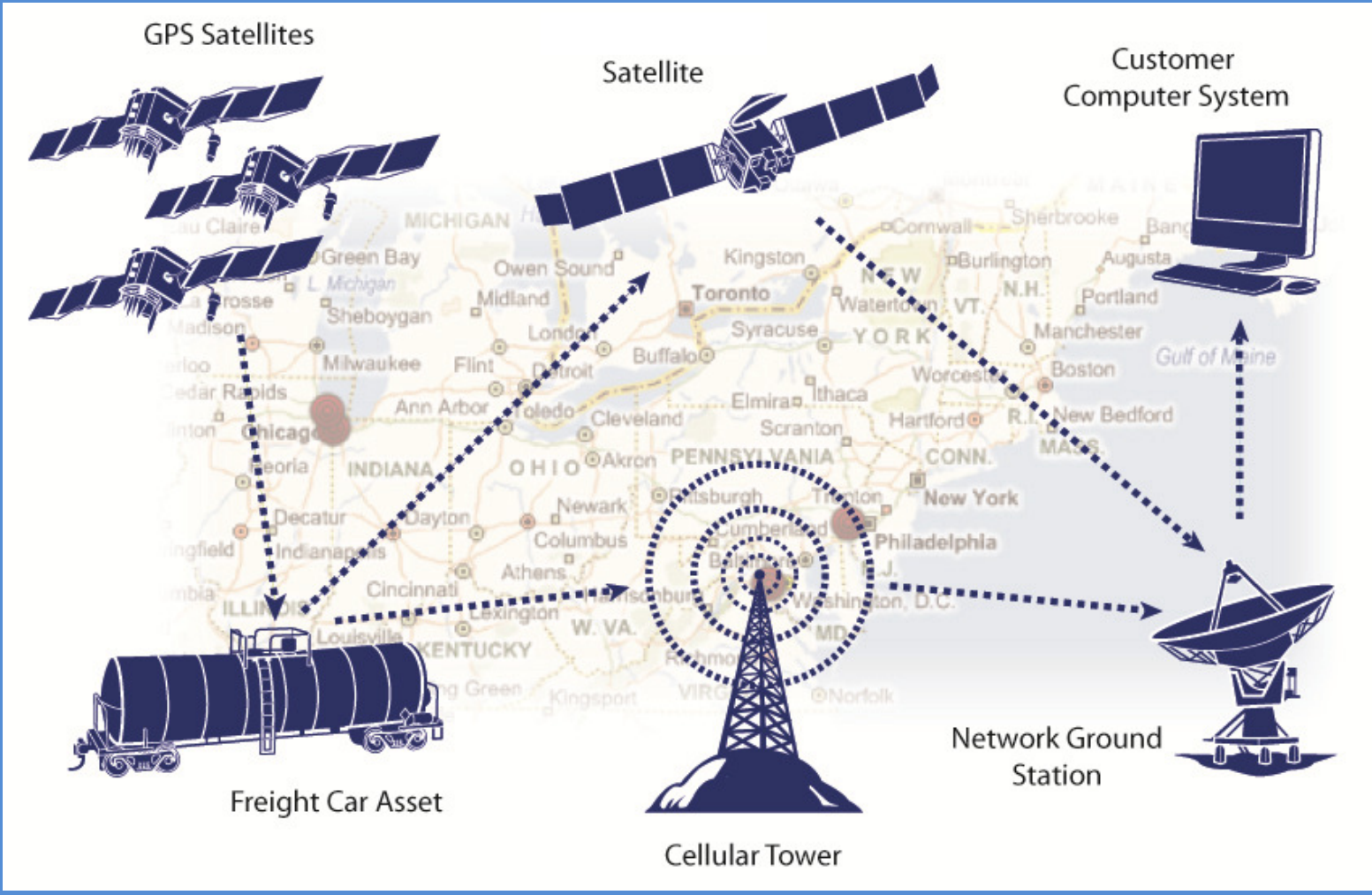
- The process of reading one or more sensors to assess the condition of freight cars, monitoring change indicative of a developing failure. It is a major component of predictive maintenance.
- The use of condition monitoring allows for proactive, predictive maintenance, or other actions to be taken to avoid the consequences of failure, before the failure occurs.

Global Positioning System

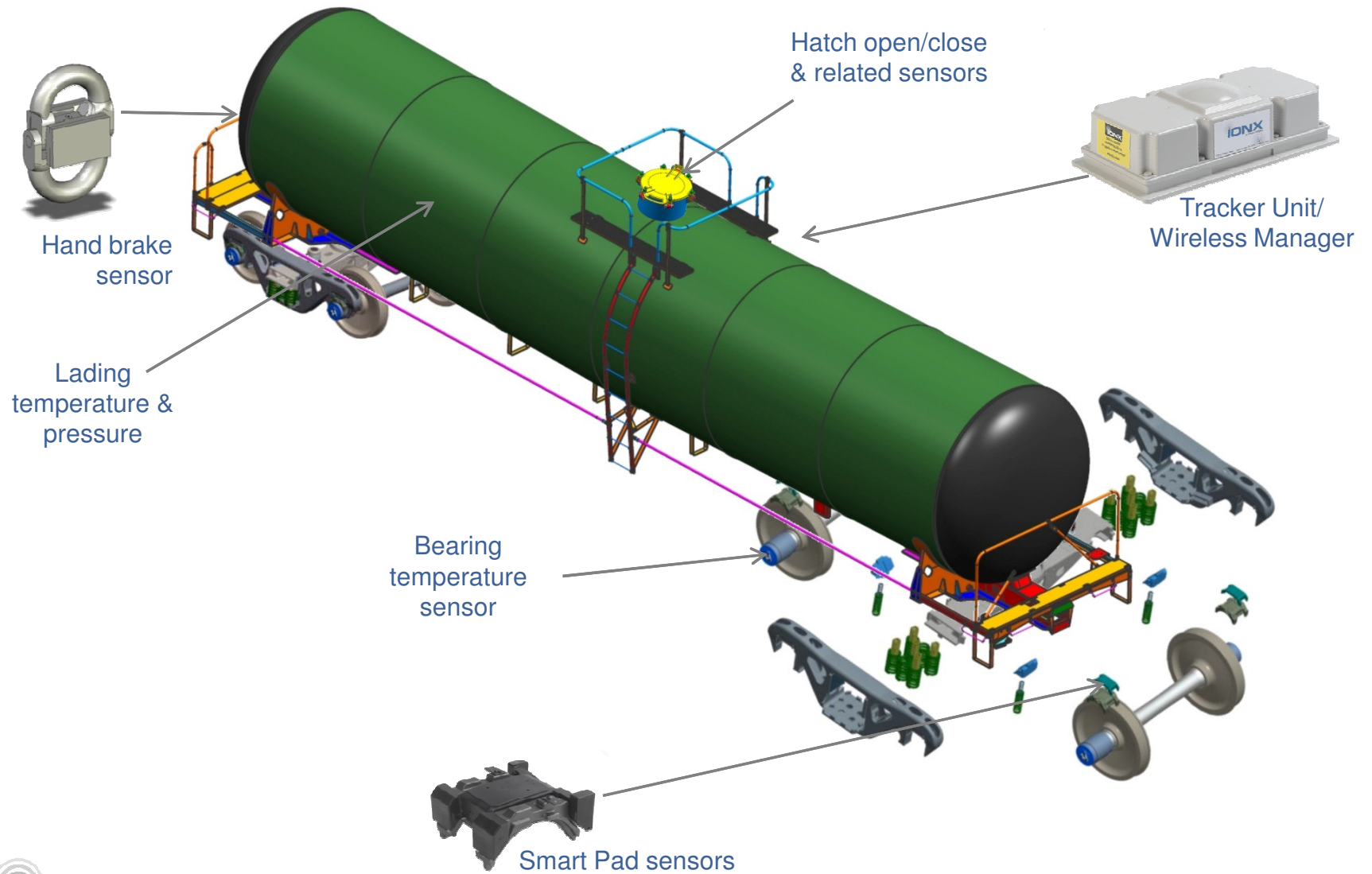
- World-wide navigation system formed from a network of satellites placed in orbit and maintained by the U.S. Department of Defense.
- Originally designed for military applications
- Location is calculated using satellites as reference points to obtain location within a matter of feet.
- It is always on and is available anywhere in the world.



How it works



Sensors



Panel

Don Loftis

Principal Software Engineer Advanced Automation
Chloralkali Products
Olin Corporation

Robert Toms

Director Research & Development
Union Tank Car Company

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Senior Analyst
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