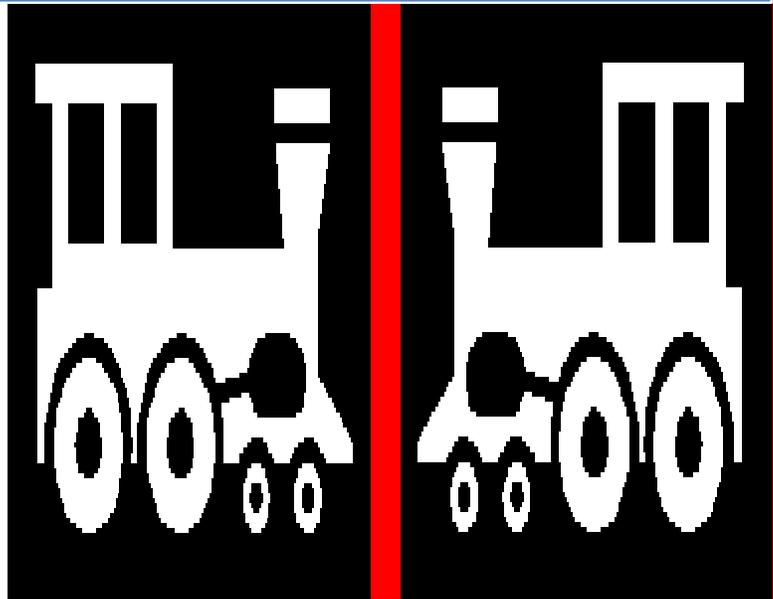


Positive Train Control Course



To prevent train accidents, Positive Train Control (PTC) is mandated by the U.S. government for deployment across much of the country's railroad operations before 2016.

The challenges are substantial, but so are the opportunities . . . that is if engineers properly understand the underlying functionality, technologies, value ... and the politics.

Ronald Lindsey

Strategic Railroading

ron@strategicrailroading.com

904 386 3082

OVERVIEW

The course is designed to address the world of PTC for both the experienced rail engineer as well as those new to the industry. It begins by developing a threshold of understanding of the rail industry as to its structure and environment, followed by an explanation of traditional railroad operations and technologies. With that basis established, PTC is described as to history, regulation, functional requirements, technical challenges, and its future. The course goes an extra step to also address the politics of PTC that are critical to its progression, including the hype that is delaying the ability of the railroads, both individually and collectively as an industry, to advance their operations.

AGENDA

The 1-day course can be modified somewhat to meet each client's particular requirements. The normal structure consists of 8 segments.

- | | |
|--------------------------------|------------------------------|
| 1. Industry Environment | 5. PTC Technologies |
| 2. Rail Operations | 6. Interoperability |
| 3. PTC Regulation | 7. PTC: What It Isn't |
| 4. PTC: What It Is | 8. PTC's Value |

There is also an option to extend the course to a second day of discussions with individual groups, e.g., Sales, Engineering, and Senior Management.

AVAILABILITY & PRICE

The course is available to individuals and organizations on a requested basis. It can be provided on the customer's site as well as via webcast for handling multiple locations. Each individual attending the course is provided with a hard copy of the presentation deck. Additionally for Professional Engineers, a *Certificate of Attendance* is provided for each attendee indicating 8 hours of Professional Development Hours.

The cost of the course varies by the number of attendees and ranges between \$500 to \$1,000 per individual with a minimal requirement of \$8,000 per session. Expenses are additional.

CREDENTIALS

Ron Lindsey has 40 years in the railroad industry split between consulting and railroad management. As management he has held the positions of Chief Engineer Communications for a Class I as well as Director Advanced Train Control for Class I railroads. In the latter position Ron was the architect for the first overlay PTC system that provided the foundation for the PTC systems being deployed across most U.S. freight railroads to meet a Federal mandate. As an independent consultant, Ron represents no suppliers. In addition to strategic consulting assignments for railroads and suppliers alike, Ron has a ***Railroad Immersion Course*** which has been taken by Class I's and major suppliers. In addition to his own publication of 15 years, ***Full Spectrum***, he has been published in *Progressive Railroading*, *Journal of Transportation*, *IEEE Vehicular Technologies* and is a Contributing Editor for *Railway Age*. Ron is a frequent speaker at railroad conferences. Lastly, Ron was the Project Leader for a team selected to perform a PTC feasibility study for the Egyptian National Railways resulting in his design of Virtual CTC (VCTC) to increase the safety and efficiency of small and medium railroads.