CAPITOL TO CAPITOL

Victorian Ergonomics

By: Robert "R.B." Frank— Legislative Rep Diva 839

Believe it or not, the year 1911 marks the start of todays 'standards' for grab iron, ladder and foot stirrups on R.R. freight cars. These 94 year old 'standards' were formulated during an era — The Victorian Era — when so much of everything was painful including painful health care, if any, as well as painful labor occupations, where the pain was thought to •be consistent with a good work ethic. Today, as then, awkward to board, awkward to ride and awkward to dismount railcars are made even more painful with the awkwardness of Belt-Pack controls.

Bear in mind that in 1911, the minimum hiring height for a swith<u>man</u> or brake<u>man</u> was 5 foot, 6 inches. Even though the average man is approximately 3 inches taller than he was 94 years ago, he has failed to keep pace with the growth in rail height, which is now 4 inches taller at 8 inch, typically. Additionally, equal employment opportunity laws have enabled switch<u>women</u> or brake<u>women</u> to be 5 foot tall or even less. With mainline track ballast profiles approaching or exceeding several feet, even a 7 foot tall man would need to "helicopter" down, ever so carefully, when dismounting a railcar. As you can see, the obsolescence of these 94 year old 'standards' is not merely stagnant or constant, but is indeed compounded for the worse by the already mentioned trends of changing human make-up, track engineering, laws, new operating rules and the increasing burden of electronic devices.

During the same 94 years, railcars have evolved incredibly, otherwise! Imagine steel wheels, which last one million miles between machinings or changeouts! Polyurethane paints, which last the life of the railcar! GPS! Satellite control of thermostatic settings on reefers! These metallurgical, chemical and electronic miracles are only surpassed by the unmiracle of utter disregard in not overcoming VICTORIAN EROGONOMICS, which agaiAn, are 94 years old.

In conclusion, even though 1911 is recent history, I could find nobody among the car builders, Carriers, Unions or regulatory agencies who knew how the 94 year old 'standards' were formulated. To know not, the basis for the formulation, is to also know not why these 'standards' should be repeated forever, particularly and immediately in the case of tank cars, where only 2 point contact is achievable, given current BNSF rules. It's understood that noncarrier fleet owners of railcars will be resistive to safety improvement retrofits. However, fleet owners don't pay FELA lawsuit settlements. Therefore, the interest of the Carriers, in this

case, is the same as the Union(s) in helping employees stay as injury free as possible by means of user friendly grab irons, ladders, stirrups and perhaps new laws, if necessary.

Thank you.