

Boeing 787 Dreamliner, Train Technology, etc.

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Who could have missed Boeing's current technical difficulties with their new 787 Dreamliner? But who remembers from a decade ago the not-too-dissimilar difficulties that Amtrak had with their then-new Acela train, and the criticism then leveled at Amtrak by a few politicians? Now Amtrak and the California High Speed Rail Authority have joined forces to explore the procurement of up to 59 new high speed trains; Train "X" for our purposes in this piece (actually there was a "Train X" back in the fifties).

What do all three projects have in common? RISK ! The challenge of converting innovative design and construction plans into a safe, serviceable, reliable product. The problem recurs from time to time. Recall the ill-fated Lockheed Electra turboprop of the late fifties and early sixties, which had a history of falling out of the sky. Trains have been much less in the news, on this score, because there has been less radical technological change. However there should be, and there must be, if the rail mode of transportation -- both freight and passenger -- is to attain its full potential in U. S. transportation.

Much of what has occurred in railroading over the last fifty years has been of the nature of incremental technological progress. Cumulatively, there has been quite a lot of it. However, without the direct benefit of huge public funding of NASA and DOD projects, which have inured to the benefit of aviation, the rail mode of transportation in the U.S. has inched along into the 21st century.

Much in railroading today would still be somewhat familiar to George Westinghouse and Commodore Vanderbilt. It is refreshing to see California and Amtrak -- the latter to add capacity and expand service in the Northeast Corridor -- pushing the envelope of technical possibilities, e.g. a new Train "X" capable of 220 m.p.h. when track infrastructure will permit. We hope that when, and if, such trains begin to roll off of U.S. assembly lines that the Wall Street Journal, and other normally skeptical business voices, will be as empathetic with California and Amtrak as they now appear to be with Boeing's headache, and with United and other airlines' grounded 787's.

The really big rail breakthrough would come in freight railroading when -- weaned of coal, and forsaken once again (at some future date) by petroleum shippers once sufficient new pipelines are in place -- the railroads come face to face with the imperative of creating a viable business future out of handling highway-competitive cargo, using a combination of yet-to-be revealed new handling technology, together with innovative service and commercial arrangements that might make it almost as easy to use intermodal rail freight as to take the on-ramp of the nearest Interstate. But it will take

more. It would help to level the competitive playing field by assisting in the provision of certain *intermodal* rail freight services by using a portion of the Virginia State general sales tax for rail freight, *as we already do for highway freight*. Now, that's public policy innovation, which has its own risks and rewards. Think about it. # # # #