

AIR BRAKE TEST (CFR 232, 238)

TRAINING & EVALUATION SIM

BACKGROUND & PROBLEM

Inspecting and testing rail car air brakes, a common railroad task, is a fundamental part of a railroad's initial training for Conductors and rail car Mechanics. This inspection and testing, known as Air Brake Test (CFR 232, 238), requires railroads to have multiple rail cars on-site and allocate a significant amount of training time for demonstration, practices, and evaluation.

SOLUTION OVERVIEW

To alleviate physical space and time constraints, Railroads can deploy an Interactive 3D Simulation covering the complete inspection process. The simulation allows a student to visually inspect a variety of randomized rail cars, as part of a train, while manipulating brake components as necessary to properly configure the brake system. The student determines correct brake pressure and inspects for brake application & release via an exam practice mode. This gives the student additional practice at their pace with a record of their performance given at the end.

Used for: Classroom Training, Evaluation.

FEATURES

Possible train defects:

- Air hose leaking, Piston leaking
- Angle Cock leaking, Retainer Valve leaking
- Cut Out Cock leaking

Complete list [here](#).

Car types: Gondola, Flat, Box, Tanker, Hopper, Well/Intermodal.

Available on PC, Mac, iOS, Android

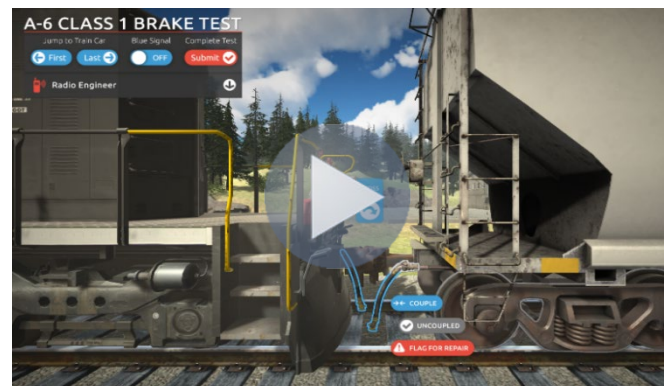
BENEFITS

1. Improved knowledge of air brake components and functions and Increased efficiency when performing the Air Brake Test.
2. Reduced need for live equipment (Locomotives/rail cars allocated for training).
3. A standardized training resource and a formalized tool for refresher training - part of a wider initiative for meeting FRA Part 243 training requirements.

WHAT TO EXPECT

After using the sim, employees should be able to:

- Identify and determine the correct positioning of rail car air brake system components
- Manipulate air brake system components and determine correct brake pipe pressure, determine if a brake is applied/released
- Complete a Class I Brake Test (CFR 232, 238)



"Confidence and mastery has noticeably improved! Where students seemed uncertain, they now know what they're doing. Training 100 mechanics & 1800 conductors using the sim and up to 15,000 soon." – Norfolk Southern
"Rolling the Air Brake Sim to the entire Mechanical group" - CSX

Want the same results for your workforce? License this simulation for immediate deployment or discuss a custom requirement – solutions@hwd3d.com or call 888.781.0274 ext. 701