

of tests in which certain special driving techniques were used such as pumping the brakes (intermittent brake application) and power-braking (applying power without accelerating with the right foot while braking with the left foot). In addition to the above tests which were run on lake ice to the extent that weather and ice conditions permitted, braking

truck versus an identical truck equipped with an automatic locking differential.

The tire chain tests included two general types of chains: (1) regular plain round wire chains of the type designated as standard by most chain companies; (2) premium chains specially designed for use on ice, with each link of the cross-chain reinforced with pro-

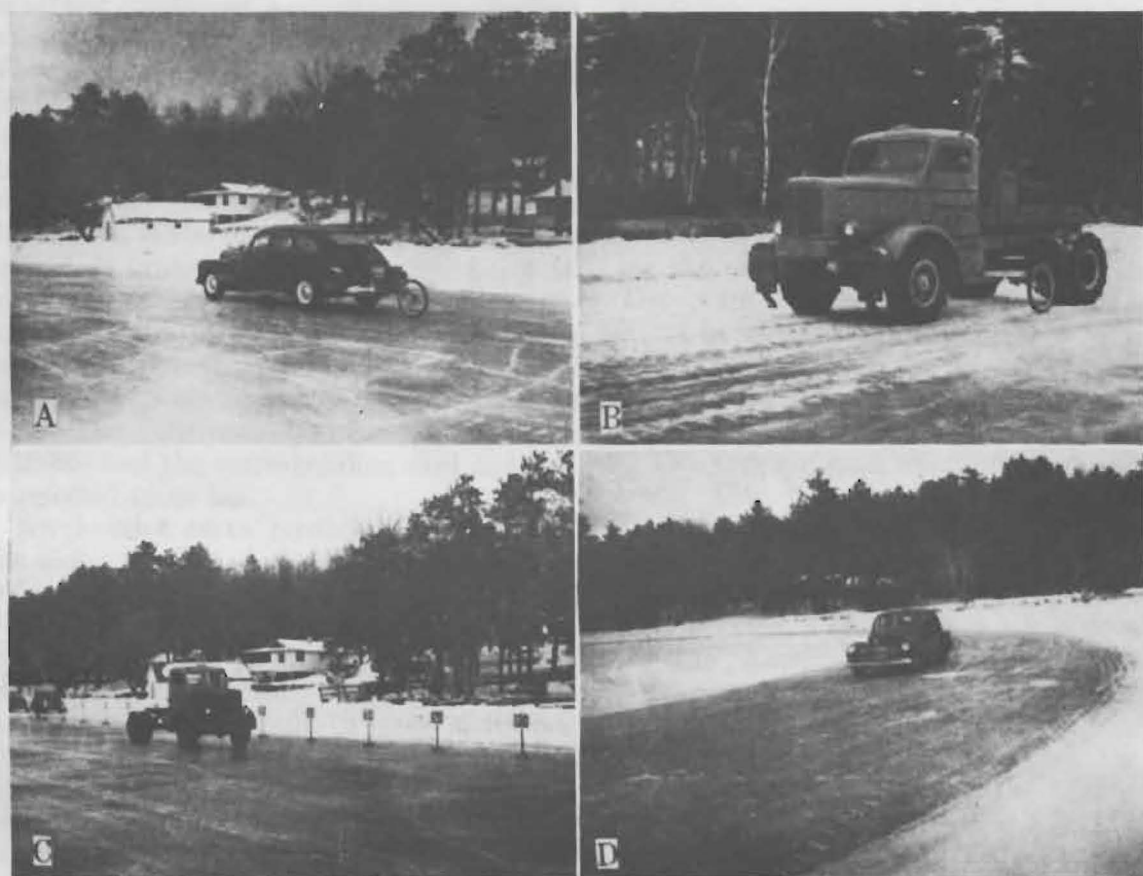


Figure 2. A. Passenger Car In Braking Test on Glare Ice with Fifth Wheel Tachometer Used to Provide an Accurate Measure of Speed. B. Experimental Truck Loaded Equipped With Tire Chains and With Sanders. C. Braking Test on Glare Ice With FWD Experimental Truck Empty. Distance markers were used as aid in taking motion pictures of tests. D. Circle Test With Passenger Car to Determine Maximum Speed on Ice With Bare Tires for 150-foot Radius Curve

and acceleration tests were also run on natural road ice, packed snow, and on dry concrete pavements.

Tests with sanders included a comparison of the relative effectiveness of four different types of grits commonly used in sanders. Tests were also run to compare the accelerating characteristics of a four-wheel drive truck and a conventional drive truck under the same load and road surface conditions. A limited number of tests were made to determine the acceleration of a standard differential pick-up

jecting teeth or lugs. All chains used in these tests were new. Previous Committee tests have shown that braking distances for half worn chains were from 15 to 50 percent longer than for new chains; acceleration and circle test performance was likewise poorer than with new chains.

TEST PROCEDURES, TECHNIQUES, EQUIPMENT AND CREW

Types of Tests—Braking distance, acceleration, and circle tests were made for most test