

TRUCKING: HISTORY AND LEGEND

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## PREFACE

The trucker has a position unique in American history and mythology. Simultaneously he serves as a folk hero and as a vital link between the citizens of the nation and the goods they desire. In fact, he occupies the same niche filled in the nineteenth century by cowboys, railroad engineers, and stagecoach drivers and in previous centuries by the sailor. He is regarded as worldly, mechanically knowledgeable, physically strong, and attractive to the opposite sex. In short, he is the hero of ballads, the idol of youngsters, a "knight of the road". This study is an attempt to trace the history of this industry and to explain how truckers earned their romantic image.

Recently there have been several studies, both popular and scholarly, about truckers and trucking. However, this work is unique in that it seeks the thread connecting myth and reality. The technique used is simple and demonstratable. By tracing the industry from its birth to maturity, including major technological advancements, the basis is laid for an examination of the trucker's role in American life and a discussion of the myth surrounding those who drive the big "rigs". Although many of the tales concerning these rugged individuals emphasizes the masculine character of the driver, this study concludes that the stereotype rapidly is fading because of technological advances. Today's driver no longer, of necessity, comes from the lower end of the economy or the rougher elements of society. Automatic transmissions, citizens' band radios, mobile mechanics, and tire repair service available



anywhere make it possible for the driver to be mechanically illiterate and physically weak--or female. The future of the industry is uncertain, for new advances come almost weekly.

During this investigation I incurred numerous debts, which I here acknowledge. For his constant interest and helpful suggestions, his friendship and advice, his loan of materials and directions to sources, I am deeply grateful to Dr. Joseph A. Stout, Jr.; the study could never have been completed without his encouragement. Also, I thank the other members of my committee: Professors LeRoy H. Fischer, Neil Hackett, Peter Rollins, and Odie B. Faulk. In addition, I thank Dr. Carl N. Tyson for the thoughts he contributed and the friendship he gave.

Writing is lonely work, but the family of the writers suffers equally. His wife suffers the loss of his companionship and his children their father's watchful eye. However, they do not have his feeling of accomplishment. To my wife Johnna and my children Julie and Jason, I promise greater devotion in the future and my heartfelt gratitude for their understanding attitude as I completed this work.

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## CHAPTER I

### EARLY TRUCKS AND TRUCKING

Great bands of concrete span the nation's length and breath, forming the domain of the modern trucker. Hauling hogs or hardware, the trucker appears the same to the outsider. He exudes independence, ruggedness, and individualism, for he has conquered a firebreathing beast called a truck. But the hard work and hard life which once was the glory of the trucker is no more. Today the truck is the driver's home. In it he has all the appointments which fill his needs. Wheeling down a super-highway, the trucker is in the lap of luxury rather than in the midst of battle--the truck is an extension of his body, the mistress of his desires.

Where once two gauges and a starter button stood, today there are dozens of lights, gauges, and toggle switches. To soothe the trucker's weary back, there are hydraulic cushions; to cool his heated brow, chilled air flows; to relieve his tedium, soft strains fill the cab from the stereo radio or eight-track tape player. From New York to Chicago in fifteen hours, from Dallas to Los Angeles in thirty hours, the trucking man rushes to move the next load, encased in his armored home. Today the trucker is blessed with any comfort he can imagine, including television, leather paneling, and foam mattresses in his sleeper. But the modern truck and all its richness did not spring full grown from some driver's dreams. It was the result of years of hard

work and technological advance.

Before there were trucks there were automobiles. As early as the 1830s self-propelled carriages moved on the roads of England. These, like many of the early "cars", were powered by steam boilers which required inordinate amounts of fuel and water, and had an unsettling propensity to explode at inopportune times. Because of public misgivings concerning this self-propelled vehicle, such as the assertion that humans could not survive at the rapid speed of thirty miles per hour for the wind would prevent breathing, these early attempts to provide over-the-road transportation were soon legislated out of existence. However, progress would not be deterred. If steam was unreliable and dangerous, inventors would find something better. In 1884 Gottlieb Daimler patented the internal combustion engine fired by gasoline (or petroleum spirits). This new form of power soon was applied to boats, bicycles, and stationary equipment, and by 1887 the French firm of Panhard and Levassor had produced the first workable gasoline-powered automobile. By 1890 the world seemed about to be overwhelmed with these new inventions, as almost every mechanically inclined individual combined the gasoline engine and a three-or four-wheeled carriage to produce his own interpretation of what the automobile should be.<sup>1</sup>

Despite the proliferation of self-powered cars, there was work to be done. Much of this burden fell on Carl Benz and Gabriel Daimler, two inventive Germans who lived less than one hundred miles from one another. Although they pioneered the gasoline-driven automobile and shared geographic proximity, the two leaders reportedly never met. However, their work closely corresponded. Startling new advances were frequently made by each without the other's knowledge. By the time

these two finished, much of the basic machinery of the modern automobile had been created.<sup>2</sup>

Although the Germans Daimler and Benz pioneered, ingenious Yankees in America soon came to the fore in automotive engineering. Late in 1893 Charles E. and J. Frank Duryea combined a one-cylinder engine with a second-hand carriage to produce the first successful gasoline-powered vehicle in America. Quickly other Americans entered the fray. In 1896 the Langert Company of Philadelphia created a gasoline delivery wagon, one of the first trucks to appear on the scene, in the Cosmopolitan Race (from New York to Irvington-on-the-Hudson and return). Soon Cruickshank Engineering Works of Providence, Rhode Island, Charles E. Woods of Chicago, C. S. Fairchild of Portland, Oregon, and Alexander Winton of Cleveland were competing with the Duryea brothers for dominance in the new industry.<sup>3</sup>

Although gasoline was the most popular form of power, others clung to steam. The two most successful were the Stanley brothers of Newton, Massachusetts, and the White Sewing Machine Company of Cleveland. Electricity also was a favorite source of propulsion. In 1898 A. L. Riker, an enterprising young graduate of Columbia Law School, entered a battery-powered wagon in an electrical show held in Madison Square Garden. The most impressive aspect of Riker's wagon was the battery, which weighed more than one thousand pounds.<sup>4</sup>

Riker's invention, paralleled by the work of Alexander Winton, was of seminal importance because it marked an early excursion into the motor-driven transport of freight. This was a major departure from previous efforts. Whereas the automobile was to most people either an exotic toy or hobby, the truck was decidedly businesslike. Its design

and purpose were economic. Although both the car and truck would become necessities, they would take separate routes to acceptance.<sup>5</sup>

The "commercial car," or motor truck, was born from what was considered high luxury in the first decade of the twentieth century. The horseless carriage represented "an ocular demonstration of the lure of the city, of riches and snobbishness, of unnecessary extravagance and of dust."<sup>6</sup> Local governments passed ordinances banning automobiles from their streets, for these scared the horses and mules used by teamsters hauling freight. However, when second-handed touring automobiles appeared on the market, the trucking industry was born. Merchant and farmer stripped the touring body from its frame, attached a wagon bed to the car skeleton, and result was a crude but efficient light delivery wagon. As these converted automobiles gained in popularity, there was "a mushroom growth of motor-truck factories."<sup>7</sup>

The infant trucking industry fought hard to overcome the resistance of the general public to a radical change in transportation. Advertisements, manufacturers' shows, and competition between trucks stimulated interest and sales, but increased profit from reducing the cost of moving goods eventually decided the vehicle's future.

Competition between trucks was a direct outgrowth from the established practices of automobile enthusiasts. Automobile touring clubs, by their nature, were competitive. Engineers recorded speed and gas consumption; drivers tested endurance. The popularity of these contests in the late 1890s, combined with the growth of a manufacturing industry producing many types of vehicles in various configurations, resulted in the organization of the first formal test for commercial trucks in 1903.

Sponsored by the Automobile Club of America, the event was held in New York City. The stated purpose of the test was to demonstrate to businessmen--and the public--that commercial truck transportation was not only a possibility but also an economic inevitability. Builders and supporters of trucks previously had asserted that trucks were economically preferable when compared with horse-drawn transportation. This test was to illustrate the veracity of this assertion--on a mile-by-mile basis. The event lasted two days and covered twenty miles. The route began at the Automobile Club of America's Club House on Fifth Avenue; it circled Central Park to the Battery and returned to the point of origin.<sup>8</sup>

Eleven companies were represented by fourteen entries, demonstrating how rapidly there had been a proliferation of manufacturers. Because of design specialization, the contest was divided into five divisions. These were assigned according to load capacity. Light delivery wagons were separated into two categories: those carrying less than one ton, and those carrying more than one ton but less than one and one-half tons. Other classifications were less than three tons, less than four tons, and more than four tons. The lightest vehicle entered in the race was a steam-powered truck from the Mobil Company of America. This light wagon utilized gasoline instead of coal to fire its steam boiler, providing four and one-half horsepower and a load capacity of 750 pounds. The giant of the field was a steam-powered Courtland from Preston, England, which carried 12,000 pounds and boasted thirty horsepower.<sup>9</sup>

Although the twenty-mile course could easily be negotiated by today's vehicles, it proved a torture test for many of the early trucks.

During the first day one gasoline-powered wagon failed to finish when a hand pump broke and the fuel caught fire. The only other casualty was a heavyweight Herschman steam truck with a dry weight of 20,000 pounds. Carrying a 10,000-pound granite brick, the wagon developed a leak in its boiler and was forced to the sidelines. The lighter trucks made two laps around the course in respectable times. The winner, a Waterless Knox, used an eight horsepower, gasoline engine to run the forty-mile course in three hours and thirty-five minutes; in the process the vehicle consumed four gallons of gasoline. Among the heavy trucks, a Herschmann traveled one and one-half laps in six hours and thirty minutes. The heavy steam truck carried a load of 3,800 pounds of cobblestones, more than two and one-half times the freight load of the Waterless Knox, but it consumed 230 pounds of coal and one hundred and seventy-two gallons of water. The second day of competition was a repeat of the first, except the winners reduced their time in covering the same distance. The light trucks proved their reliability. The Waterless Knox averaged almost eight miles per gallon of gasoline, and the electric entry, the Waverly, used only two dollars and fifty cents worth of current. However the English Coulthard needed 1,335 pounds of coal and 869 gallons of water to cover sixty miles. The operation of such an inefficient vehicle was not only economically unsound, but also its frequent stops to take on fuel and water increased an already-large part of transportation cost, labor. Although many were impressed by the race, it clearly did not fulfill its objective of gaining general public acceptance for trucks.<sup>10</sup>

The following year the event was repeated. The statistics that year were more impressive for the lightweight trucks, but again the



heavy trucks appeared too cumbersome to compete with the horse-drawn wagon. Unfortunately the trucking industry remained wedded to the innovations of the early automobiles. Most commercial delivery wagons were automobiles that had been stripped of their touring bodies and a truck bed mounted on the chassis. The heavier trucks did not have such a built-in advantage, and their yearly production remained small until World War I.

Motor truck enthusiasts and builders proved the durability and efficiency of the commercial horseless carriage, but they had to overcome an age-old tradition, horse-drawn transportation. At first the public demanded that the "devil's wagon" be outlawed from public streets. Trucks caused horses to stampede, roads to erode, and chickens to stop laying. Avid supporters of motor transportation accepted the challenge and fought prejudice and tradition. An extensive campaign against the horse began. Horseless carriages were reported to be the savior of mankind, the solution to economic ills, the end to an archaic mode of transportation, and the catalyst that would catapult America onto the road to affluence.<sup>11</sup>

Even the basic structure of transportation was questioned. The railroad already had made a tremendous impact on the American economy. Unquestionably the industrial boom between 1865 and 1900 had been aided greatly by the more efficient and less expensive rail transportation. Urban freighting by horse-drawn wagons had not advanced in technology for centuries, so the railroads had provided new transportation routes where none had existed. The businessman was not asked to invest money, but he was given a cheaper or faster service, and the maintenance and operation of freight vehicles were the responsibility of the railroad company.

Trucks offered an extension of the railroads' efficiency and a replacement for the horse. Popular journals and scientific magazines accused "the animal motor" as wasteful, the poorest motor ever built, and an economic anachronism. Yet as late as 1913 most businessmen were hesitant to forsake the estimated \$1,000,000,000 investment which they had in 10,000,000 dray horses.<sup>12</sup> The total number of trucks in the United States at the beginning of 1912 was estimated between 20,000 and 25,000.<sup>13</sup> The increase had been steady, if not spectacular, since the turn of the century. Total truck production in 1913 was more than 20,000 vehicles, and by 1917 New York City alone boasted 25,000 trucks actively engaged in freighting. This increased production and use of the truck illustrated the success of the campaign against "Old Dobbin."<sup>14</sup>

The comparative cost of horse-drawn and truck transportation was overwhelming in favor of the truck. In 1912 a five-ton wagon drawn by three horses could average forty-five ton-miles at a cost of eight dollars per day. A motor truck with a five-ton capacity cost twice as much to operate per day, but could haul almost three times the ton-miles of a horse-drawn wagon of equal size.<sup>15</sup> The statistics of the truck's performance were even more impressive under adverse weather conditions. During a two-week heat wave in New York City that started on July 3, 1911, 1700 horses died from heat exhaustion, and thousands were disabled and rendered useless for future freighting duties.<sup>16</sup> Although these figures were higher than normal, similar incidents took place each summer; the average death rate in July for horses in New York City for the same period was almost 500 per week. Moreover, horses required one day of rest for each day of work. The motor truck was able to overcome these conditions and proved to be far superior in hauling perishable

goods. Businessmen were forced to use ice to keep the milk, meat, and vegetables carried by horse-drawn wagons cool and fresh. A horseless carriage hauling the same load moved so quickly in comparison that the products could be covered with wet burlap--a saving of time, money, space, and weight.<sup>17</sup> During the winter in northern cities, ice and snow limited the horses' dependability. These animals expended much of their energy trying to stay on their feet, and with a heavy load many horses lost their footing, which resulted in broken or crippled legs. The introduction of traction chains for truck tires enabled motorized transportation to perform without a marked reduction in efficiency.<sup>18</sup>

Economy and concern for the noble horse swayed many Americans to accept the commercial automobile. However, the horse was not allowed to retain its honor as it retreated before a wave of technology. The truck lobbyist, not content with the long range change to motorized freighting, tried to destroy the image of the horse. The horse, lambasted as a "purveyor of filth,"<sup>19</sup> was charged with the preventing of proper sanitation in the cities. Frequently traveled streest pictured as "literally carpeted with a warm, brown matting of commuted horse-dropping, smelling to heaven and destined in no inconsiderable part to be scattered in fine dust in all directions, laden with countless millions of disease-bearing germs."<sup>20</sup> Moreover, traffic congestion in cities would be relieved by the use of trucks. Fewer vehicles would be needed to carry the same amount of freight, and trucks occupied less space than horse-drawn wagons of the same carrying capacity. The space saved would be almost one-third in the street and almost two-thirds in the stable.<sup>21</sup> With the approach of World War I, the horse found yet another adversary--proponents of increased war productions.<sup>22</sup> President

Woodrow Wilson believed he had to "train a nation for war," and as the American people were encouraged to produce more and consume less, truck enthusiasts found a perfect example of waste: "old dobbin." Various estimates of the horse population in the United States in 1915 ranged from 25,000,000 to 30,000,000. Each consumed ten pounds of food each hour it worked. Five acres of land that could be used to produce grain and hay were required to feed the average horse each year; this same five acres of land could feed five people if converted to production of human food. More than 100,000,000 people could be sustained on the land set aside for horse feed.<sup>23</sup>

In 1916 pro-automobile forces received aid from an unlikely source. The revolution that had started in 1910 in Mexico spilled over the boundary into the United States in March of 1916. Pancho Villa, bandit and self-proclaimed hero of the peons, showed his intense hatred and contempt for the "Gringos of the North" by conducting a raid on Columbus, New Mexico. The American public and press clamored for a declaration of war in retaliation for the seventeen Americans that were killed. Instead, President Woodrow Wilson sent an expeditionary force under the command of Brigadier General John J. (Black Jack) Pershing to break up the Villista band and capture Pancho Villa. Although the Pershing Expedition was only a partial military success, it was a total transportation triumph for the young trucking industry.

The Mexican bandit had an obvious advantage of fighting on a dry, desolate, familiar terrain. Pershing's major obstacle was providing transportation for his fighting force and maintaining a supply line 400 miles into the Mexican wilderness. To solve this problem "Black Jack" requested one hundred trucks. Fewer than 1000 trucks were owned by the

Army and these were scattered over the United States; moreover, truck manufacturers were hard pressed to fill war orders for the Allies fighting in Europe. And, the Army had not adopted a standard truck; manufacturers delivered the requested vehicles, but there were a total of 128 makes and models represented. The Army was unprepared for motorized warfare. At the central repair shops and parts supply depots at Columbus, New Mexico, chaos reigned throughout the eleven-month campaign. Civilians were hired to drive and repair the trucks until the Army could recruit or train men.<sup>24</sup>

During the expedition, Pershing penetrated 400 miles into Mexico. Twenty-two transportation companies, each with twenty-five trucks, performed feats that out-dated the old war horse. The speed and reliability of the trucks traveling through the heat, dust, mud, and sand proved the superiority of motorized transport. The Villa campaign demonstrated the need and led to the general acceptance of motorized logistics in the Army. The lesson proved a valuable one, for on April 6, 1917, less than two months after Pershing was recalled from Mexico, Congress declared war against Germany and its Allies.<sup>25</sup>

The United States Army was ill-prepared to engage in a major conflict. There was a general shortage of men, supplies, and ammunitions. However, the Army owned 2,400 trucks and had tested drivers, mechanics, and machines against an elusive enemy. This small number of trucks and men seemed insignificant in relation to the total war effort, but in relative terms, compared to the Army's arsenal of 1500 machine guns and fifty-five airplanes, the Motor Transport Corps was well prepared. During World War I the truck and trucker provided excellent transport services for men and goods. The major problem was the insufficient

numbers of vehicles shipped to Europe. Pershing pleaded with Washington to send more trucks, and reported that for want of transportation his "situation was critical." Ambulances were not available to remove the wounded from the battlefield. At another juncture he reported to the Chief of Staff that "our ability to supply and maneuver our forces depends largely on motor transportation...",<sup>26</sup> and the shortage of trucks was embarrassing. The only way that American forces were able to carry out their military plans was to borrow trucks and ambulances from the French army.

The newly created Motor Transport Corps had an abundance of other problems, and many, as in the Mexican campaign, were caused by the different makes and models of vehicles operated by the Army. At one point it was estimated that the Allies used 213 different types of vehicles which required 60,000 separate parts that could not be interchanged. Before the end of the war the Quartermaster Corps came up with a solution, in "dough-boy" vernacular: the "Liberty truck." The Standard B heavy truck was developed by the Army independent of commercial models, and the light-duty White became the Army's Standard A.<sup>27</sup>

The by-products of war were invaluable in increasing the total truck sales in the United States. Photographs of the many applications of trucks to different phases of war, the heroic efforts of the Transportation Corps, and appeals to the public to utilize trucks to haul much-needed food for the war effort "advertised the motor truck to the world more than anything else ever would."<sup>28</sup> Before the United States had entered the war, a writer had estimated the "white space value alone of the pictures printed in American newspapers and magazines...of the motor truck in the present European War would have cost the motor-

truck industry of the United States a round sum of \$15,000,000."<sup>29</sup>

Demands early in the war enabled truck manufacturers to sell their obsolete styles and equip their trucks with the same technological advancements that the passenger automobile enjoyed.<sup>30</sup> Many automobile plants maintained truck departments because a few trucks could be sold using the reputation of their passenger car. Wartime production produced an array of speciality trucks: for moving big guns, tanks, aircraft; as mobile homes for butcher shops, machine shops, garages, telegraph, telephone, and wireless offices; as electrotyping plants for making field maps, field hospitals, field kitchens; for water wagons, fire fighting, portable searchlights, troop transports, and ambulances. The utility of the truck in the war zone resulted in a wider range of application, an extension of operational range, and greater productivity in peacetime use.<sup>31</sup>

President Wilson's efforts to prepare a nation for war resulted in greatly increased production and reduced consumption in America. The Fuel Administration pressed coal miners to produce more coal and the public to economize on heat. The public responded to propoganda in the newspapers, on billboards, pamphlets, and speeches by increasing production. Nowhere was the increase and the effort to reach a surplus so great as with the Food Administration headed by Herbert C. Hoover. With his popular slogan, "Food Will Win The War--Don't Waste It," Hoover waged a propoganda campaign that demanded patriotism and self-sacrifice. Victory gardens were planted in backyards and empty lots to supply vegetables for the table, and different days of the week were proclaimed as wheatless, meatless, porkless, heatless, and lightless. Fuel production increased by two-fifths, and annual food shipment to the Allied countries

rose to three times the pre-war level.

As the nation restrained its consumption in order to ship goods to Europe, the primary transportation system in America proved to be inadequate. The railroads were not prepared for the great influx of war-time goods that moved from manufacturing centers to the nation's ports. All available equipment was pressed into service to move goods for export, and farm to market shipments suffered. By December of 1917 the transportation problem became so acute that President Wilson put the entire railroad system under governmental control. The Director General of Railroads operated the railroads at a loss, but he did speed up the movement of goods. However, it was the restructuring of the railroad operation alone that solved the problem; trucks began moving goods over routes that would not have been profitable before the war. Inter-city, daily routes developed between the principal cities along the eastern seaboard. The Army and Navy utilized truck trains to deliver munitions and to transport personnel. Rural farm-to-town routes reduced the railroad short-hauls and less-than-carload freight shipments. The flexibility and speed of the truck and great demand for transport service during World War I proved that highway freight hauling could compete with the railroads.<sup>32</sup>

The federal government became interested in the nation's highways not only for movement of goods but also for national defense. The Quartermaster Department requested the Council of National Defense to determine the best routes for Army truck movements in the United States. The National Highways Association, the American Automobile Association, and the American Association of State Highway Officials were actively lobbying in Congress for a national highway system paralleling the



borders of the United States to speed the movement of troops, equipment, and munitions. After the war Herbert Hoover, promoted to Secretary of Commerce, supported improved roads and increased truck transportation. He stated that, because of inadequate transportation from farm to market, "Fifty percent of our perishable foodstuffs never reach the consumer because the farms on which they are raised are too remote from the market at which they are sold....By motor trucks the farmer will be able to reach better markets..., to spend more time actually producing on his farm and be able to sell food more cheaply by eliminating the present tremendous waste."<sup>33</sup>

The war also helped reduce the number of horses and mules because of the destruction of a great number of equines. However, the loss was not in the quantity but in the quality of the animals that were sent to the Allies in Europe. The best breeding stock from the United States was sent to be used in the war zone. From January 1, 1915, to the end of the war 500,000 horses were sent to Europe, representing one-half of the breeding stock in America. This wholesale destruction of horses led to a doubling in the price of horseflesh, and the cost of horse-drawn transportation was increased further by a rise in grain prices. Nor was the image of the horse enhanced in war. The rigors of battlefield conditions demonstrated the reliability of the truck, and war correspondents and truck manufacturers lauded motorized warfare. Whereas the horse was rendered useless when struck by a bullet, the truck could withstand many direct hits and still operate. If the motorized vehicle was damaged, it could be repaired--the horse died. The day-to-day demand put on transportation under all weather conditions soon proved the superiority of the truck.<sup>34</sup>

Trucks and their drivers became the heroes of the war. They provided food and ammunition to the troops, and they carried the wounded to the field hospitals. The majority of the trucks used by the Allied Armies either were employed exclusively as ambulances or else carried wounded to field hospitals on their return trips from delivering supplies to the front. The 200,000 trucks proved better equipped for military uses. Perhaps the chambers of commerce across the nation should have followed the advice of truck enthusiasts: "Instead of immortalizing the heroes of the great war mounted on equine bronze, it will be more fitting to perpetuate their glorious deeds seated in armored automobiles."<sup>35</sup>

At the end of the "great war to end all wars," the anti-horse campaign was no longer needed. The truck had proven itself by patriotic service. When the troops came home, they brought truck-driving skills with them. Also, the end of the war released thousands of surplus trucks for private use. The performance of trucks in the war provided the needed boost to complete a second transportation revolution in America. In 1904 seven hundred trucks had been built in the United States; production had risen at a steady rate until 1914, when the total number reached 24,900 vehicles. However, at war's end the yearly truck production was more than 300,000 annually.<sup>36</sup>

The motor truck had proven its usefulness in urban transportation and as an inter-city mover of goods during war. However, for the general public to accept the horseless carriage, better roads were needed. Overall conditions of rural roads had not improved greatly since colonial times; few states had road departments, and the federal government did not have a general fund for financial support to road

construction until 1916.

After the Civil War railroads had received public attention and governmental aid. As rails crisscrossed the continent, the farmer was able to ship his goods to market at a cheaper rate. However, the poor condition of roads required the farmer to live within a twenty-mile radius of market outlets in order to make productive use of his farm.<sup>37</sup> These primitive roads were impassable during much of the year. Spring rains reduced the roadbeds to mud, and in winter the same roads became sheets of snow and ice. Because these conditions burdened the farmer with severe limitations, many agriculturalists had called for better roads; however, marked improvements were not made until the end of the nineteenth century. During the 1880s bicycles had been used by urban dwellers to escape the cities for the more pleasant countryside; cycling became a sport for the rich. Thus began the "good roads movement." Bicycle clubs combined to form a powerful lobbying force for highway development, but their activities were short lived. A new mania, automobile touring, then swept the nation, and the rich switched their allegiance to the more gentlemanly sport. ✓

In the late 1890s organized tours hurried into the country, scattering dust, gravel, and horses in their wake. These automobile drivers found the same conditions that had plagued farmers; in good weather the roads were passable, if the ruts could be avoided, mudholes had dried, and their vehicles did not break down from the beating of the rough surfaces. Touring was reserved for the stout hearted and adventurous. As one writer noted, automobiles were "chiefly celebrated not for running but for their standing ability."<sup>38</sup> On each jaunt, extra tires, parts, and tools had to be carried. Chains and ropes were a must; tires had

to be wrapped in ropes to gain extra traction through mud and money was needed to hire a farmer's team if the ropes failed.<sup>39</sup>

The federal government took its first road census in 1904 to determine the condition and amount of improvement made on rural roads in America. Two million miles of roads existed, but only 141 miles were paved with tar, asphalt, or brick, and the roadbed had been improved on only 153,664 miles. The remaining roads were unimproved and bad. Improvements were restricted to natural resources, size of state appropriations, and the ingenuity of the local road maintenance crews. In the South, burnt clay roads were the cheapest and best roads available to the farmer. This system of spreading oil on the natural clay surface and then setting it on fire to reduce the stickiness dated back at least a thousand years. Along the coastal areas, planks or logs were laid across the roadbed to produce corduroy roads. Gravel was the most common material used for road improvement; where there was little natural road material available, sawdust and straw were used. Sawdust was frequently spread over sandy soil eight to ten inches deep and then a thin layer of sand was scattered over the top of the sawdust to prevent fires. Straw roads had a shorter life expectancy than sawdust, for fire was not the only problem. High winds scattered the straw, and, on at least one occasion a herd of cows ate the improvements.<sup>40</sup>

The "Good Roads Movement" made little headway until automobile clubs, railroad companies, highway associations, and rural population came to its aid. The automobile clubs sought to convince the public and federal government that hard-surfaced roads were essential to internal transportation in America. Their goal, to extend the urban pavement to the countryside, would allow city dwellers to escape to the

woodlands on weekends, providing wholesome recreation that could not be found in the cities. Additionally, the farmer could bring his goods to market over the same road and enjoy the social amenities offered by urban centers. Lower food prices also would result. Farmers at first balked at such an idea. Automobiles were playthings for the rich and had little practical use on the farm. However, as the good roads movement succeeded in building sample, seedling miles, farmers found that they could double their loads and reduce transportation time and expense.

Railroad companies not only approved of the good roads movement, but also sponsored seedling miles--short stretches of paved surfaces--and transported road-building machinery free of charge. In areas where wagon roads had been improved, all phases of transportation had been increased. The railroad was able to attract customers from as far as sixty miles distance, and freight volume rose. Furthermore, during harvest time railroad cars had to be stockpiled at railheads in order to accommodate the great influx of outgoing farm commodities. When unimproved roads were reduced to mud or covered with ice, the farmer could not transport his goods and the cars remained idle for weeks at a time.<sup>41</sup>

Highway construction companies had an obvious interest in the improvement of roads. Many seedling miles were constructed at cost or built free of charge by them to illustrate the advantages of hard-surfaced roads. As communities enjoyed the economic uplift brought by improved highways, "Good Road Days" were proclaimed, businesses closed for the day, farmers supplied draft animals to do the heavy work, and highway builders furnished road construction equipment.<sup>42</sup>

During the first decade of the twentieth century roads improved very little, but the farmers' attitude toward good roads and the automobile radically changed. Farmers at first had disliked the horseless carriage. Gradually, however, as roads improved, automobiles became cheaper and more dependable, the rich traded in their old car for a newer model, and a used car market developed, the price of the automobile came within the economic means of the middle class.

The farmer did not buy a motorized wagon for touring, but for more practical reasons. Used convertibles were the most popular vehicles. The touring body could be easily removed and replaced with a wooden truck body.<sup>43</sup> The popularity of such an adaptation resulted in several companies offering "form-a-truck" kits. The used touring car offered several advantages over early trucks.<sup>44</sup> The used truck market was slow to develop. Businesses did not trade in their trucks, but repaired them. When a technological improvement appeared on new models, they adapted it to their older trucks. Furthermore, the enclosed cab of touring cars offered protection for the farmer's family on outings to the local village or town. Most often, the light duty trucks that the farmer would be interested in purchasing were assembled with an automobile frame and drive train; they thus saw little advantage to be gained by buying a truck. However, by the second decade of the twentieth century there was a substantial reduction in truck prices, and light commercial vehicles were purchased by farmers.<sup>45</sup>

The impact of the automobile on the farmer, measured in economic terms, was tremendous. Transportation costs not only dictated the profit margin on most farms, but also were the single most important factor in assessing the value of the farm land. In Sullivan County,

Tennessee, for example, a farmer hauled one ton of wire twenty-three miles in twelve days at a cost of thirty-six dollars. Using a truck, the time was reduced to two hours and with a cost of approximately eight dollars.<sup>46</sup> The increase in agricultural shipments was equally impressive in those areas that improved local roads. One study, conducted between 1909 and 1911 by the United States Office of Public Roads in Spottsylvania County, Virginia, showed that the rate of agricultural and forest tonnage arriving at the railhead in Fredericksburg increased forty-five percent in the two years following the completion of forty miles of surfaced roads. Moreover, a random sample of the price of farmland in the country, for the same two-year period, showed increases from more than thirty percent to over 300 percent.<sup>47</sup>

The city dweller also benefited from improved farm-to-market roads. The farmer was able to ship perishable goods longer distances without the hazard of spoilage. Truck farms located near cities brought high rents for depleted land. Tenants paid twenty to thirty dollars per acre per year as rent for land adjacent to urban areas, while farmers located ten miles from the city rented more fertile land for three to four dollars per acre per year. In many cases, land laying further than ten miles from the city sold for the same amount as that paid in rent by an urban farmer in one year.<sup>48</sup> By 1920 it was common for a farmer to deliver goods to the city markets sixty miles distant when fifteen years earlier ten miles would have been the maximum. The result was a rise in the standard of living for workers in the cities, and, at the same time, farmers were realizing profits from crops that previously could not be marketed. The price of fresh produce and dairy products plummeted.

Automobile mania thus infected many people in rural areas. Highway

engineers, governmental agents, and popular magazines helped salesmen spread the evangelical word, "Buy an automobile and enjoy the luxuries and advantages of modern civilization." This intense propaganda for better roads and motorized highway transportation did have some factual merit, but it was not a cure-all for the American farmer. However, high speed automobile transportation allowed the farmer to enjoy the affluent trappings of the city and reduced the loneliness that previously had been associated with his life.<sup>49</sup> Before good roads, visiting a neighbor or the general store often consumed most of the day; the automobile reduced this time to less than one hour. Many women rebelled against the day-to-day loneliness of farm life; as one contemporary social commentator put it, "The lack of social intercourse has proved a stronger factor in many cases than the sterility of the ground"<sup>50</sup> for the abandonment of farms. The one-room upgraded school began disappearing, replaced by a consolidated school which boasted superior education. However, no greater effect on the social life of a farmer was felt than the establishment of rural delivery by the Postmaster General in 1896. Postal routes were extended steadily as roads improved; the farmer was brought "within the daily range of the intellectual and commercial activities of the world, and the isolation and monotony which have been the bane of agricultural life sensibly mitigated."<sup>51</sup>

Every aspect of the farmer's social life was studied by those interested in the positive impact of good roads and motorized transportation. Vast improvement in mental and physical health were pictured for those who could not be swayed with intellectual and economic gains. Riding in an automobile after a day's work brought about "the unstringing of high tensioned nerves...." What the nervous farmer needed was a



"flight over smooth and undulating roads" to bring "rest with relaxation, and cure with comfort."<sup>52</sup> To gain the full benefits of the automobile, its owner should escape "to the roads, to the hills, to the country with their varied shades of living carpets, with freshening winds and glad'ning brooks, with bees, and birds, and flowers into nature's great laboratory where are brewed nectars and panaceas for the ills which infest mankind."<sup>53</sup> The rural population believed what they read, and the popularity of the horseless carriage among the farmers seemed boundless. Henry Ford reported that he had to chain his car to a lamp post to stop inquisitive passersby from taking it for a spin. One writer in a popular journal predicted that the automobile would bring "health, wealth, optimism, and a brighter future"<sup>54</sup> to the American farmer. A farmer's wife, when asked why they would spend a large sum of money for an automobile when they did not have indoor plumbing, retorted, "you can't go to town in a bathtub."<sup>55</sup>

As roads extended to rural areas, trucks were able to utilize these new routes of commerce. However, inter-city freight hauling was not economically feasible until state governments, with the aid of large federal appropriations, extended the few miles of farm-to-market roads across county lines and connected major cities. Few independent truckers attempted to haul freight over unimproved roads, although tire manufacturers, truck promoters, and proponents of the good roads movement did sponsor numerous transcontinental trips. Man and machine fought mud, inadequate bridges, high water, and mechanical failure to prove that trucks were practical modes of transportation. In 1911 a Swiss-built Sauger became the first truck to make a transcontinental journey across the United States. The driver left Denver on the first

phase and traveled for sixty-six days to Los Angeles; the truck then was shipped by rail to Pueblo, Colorado, to start a journey to New York. Newspaper and magazine coverage of the trip proved valuable and cheaply gained advertisement, and the following year a Packard truck sped from New York to San Francisco with a three-ton load in forty-six days.<sup>56</sup>

In 1916 one of the more unusual transcontinental trips was undertaken. William Warwick, his wife, and younger daughter left Seattle, Washington, in a one and one-half ton GMC truck, intending to deliver a ton of Carnation Milk to New York. The trip was sponsored by the Seattle Chamber of Commerce to advertise the National Parks Transcontinental Highway. The Warwicks hoped to make the trip to prove that this highway could accommodate automobile tourists. Moreover, the free advertisement gained from such an unusual trip would attract sufficient tourist trade to offset the cost of sponsoring the trip.<sup>57</sup> During the journey the driver could not accept any help when stuck, nor was he allowed to use chains, ropes, or planks. Moreover the truck did not have any special equipment, carrying only the standard tool kit.

On July 12 the truck headed east. For ten weeks Warwick struggled across the continent, digging the truck out of mud holes, rebuilding broken bridges, and appealing to local citizens for road improvement. During the 3,710 mile trip he broke forty-three bridges and culverts. In all the trip proved a failure. Transcontinental tourist and freight traffic had to wait for federal funding for roads before Seattle's dream could become a reality.<sup>58</sup>

FOOTNOTES

- <sup>1</sup>Stuart Daggett, Principles of Inland Transportation (New York: Harper and Brothers, 1934), pp. 128-130.
- <sup>2</sup>John B. Rae, The American Automobile (Chicago: University of Chicago Press, 1965), p. 7.
- <sup>3</sup>Ibid., pp. 8-11.
- <sup>4</sup>Ibid., pp. 13-15.
- <sup>5</sup>Ibid., p. 32.
- <sup>6</sup>Archer Butler Hulbert, The Future of Road-Making in America (Cleveland: Arthur H. Clark Co., 1905), p. 80.
- <sup>7</sup>Ray Giles, "The Industrial Motor Car," Colliers' Automobile Supplement, XLVII, No. 16 (January 6, 1912), p. 13.
- <sup>8</sup>Robert F. Karolevitz, This Was Trucking, A Pictorial History of the First Quarter Century of Commercial Motor Vehicles (Seattle: Superior Publishing Co., 1966), pp. 35-39.
- <sup>9</sup>Ibid.
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- <sup>12</sup>Rollin W. Hutchinson, Jr., "The Wastrel Horse," Colliers' Automobile Supplement, XLV, No. 17 (January 9, 1915), p. 21.
- <sup>13</sup>"Motor-Trucks and Motor Cars," The Literary Digest, XLVI, No. 8 (February 22, 1913), p. 405.
- <sup>14</sup>Edward Mott Woolley, "Motordom Mobilized," Colliers, LX, No. 16 (December 29, 1917), p. 7.
- <sup>15</sup>Hutchinson, "The Wastrel Horse," Colliers', p. 21.
- <sup>16</sup>Rollin W. Hutchinson, Jr., "Motor Trucks-The New Freighters," Worlds' Work, XXIII, No. 3 (January, 1912), p. 269.
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## CHAPTER II

### OUT OF THE MUD AND ONTO THE CONCRETE

The inability of railroads to carry a large increase in traffic during the war magnified the need for better highways in the United States. The cyclists, automobile enthusiasts, and farmers had made some headway before 1916. The major problem to overcome was the archaic local and state laws that administered road improvements. Until 1891 maintenance and new construction of highways in the states were the responsibility of landowners adjacent to the road, townships, counties, or engineering districts. Each citizen in the district was taxed a fixed amount each year for road maintenance; he had the option of paying the sum in cash or else working on the road personally. Most often a road day was proclaimed, and members of the community would gather outside of town with shovels, rakes, and picnic baskets to "play in the mud."<sup>1</sup> New Jersey, typical of most other states, had very few roads that were improved. Truck farmers relied on the market in nearby large cities, especially New York and Philadelphia; freighting to those distant markets over poorly constructed and maintained roads represented a great loss both in time and money. By 1891, farmers, with support from the State Board of Agriculture and the governor, had secured passage of the State Aid Law. The State of New Jersey thereby assumed one-third of the cost of construction, the property owner paid one-tenth, and the country was responsible for the remaining sum.<sup>2</sup>

The precedent established in New Jersey was followed by Massachusetts in 1893. The first law designed for the building and maintenance of state highways between cities provided that counties would grade the roads and the state would pave them. The following year the state highway commission took charge of improvements and charged the country twenty-five percent of the cost of construction. The success of state aid in highway construction resulted in a majority of the states passing similar laws.<sup>3</sup>

The states originally authorized money for road construction to be paid from the general revenue fund, but as the advantages of improved roads were realized the public demanded increased action. Highway building mushroomed. By January 1, 1914, the total indebtedness of states and counties for highway and bridge bonds was \$445,147,073. Moreover, wartime traffic put a heavier stress on existing roads, and the states responded with more funds. During a thirteen-month period commencing on November 1, 1918, the total of all approved and pending state highway bonds amounted to more than \$500,000,000.<sup>4</sup>

The federal government was slow to follow the states' example, for few states want to relinquish their power to build roads for the central government. This previously had been an important issue. At the end of the nineteenth century, the nation's roads had been the subject of discussion by many congressmen, and in 1893, a bill had been introduced in the House of Representatives "instructing the committee on agriculture to incorporate in the agricultural appropriation the sum of \$15,000 to be expended for the purpose of making investigations for a better system of roads."<sup>5</sup> In response, the committee on agriculture had drafted a statute creating the Office of Public Roads with a budget

of \$10,000.<sup>6</sup>

J. Sterling Morton, the Secretary of Agriculture, had appointed a prominent civil engineer, General Roy Stone, as director of the Office of Public Roads. On October 3, 1893, General Stone had received instructions for supervising this investigation of American roads. He was to study road management systems in the various states, find the best methods of road construction, publish and distribute his findings, and aid agricultural colleges and experiment stations in spreading scientific construction techniques. Stone was warned that the states or localities should shoulder the expense of building all roads; he was not to exercise undue influence or control over the building of any highway system, nor was he to attempt to furnish labor for the construction of any road. Any infraction of such orders would result in "hostile criticism" by the Secretary of Agriculture.<sup>7</sup>

Stone's office sent agents to give speeches, conduct "good roads" seminars, and supervise the building of object roads. Moreover, he encouraged the organization and activities of good road associations by printing future convention dates and proceedings of the meetings. Professional and scientific organizations that studied road construction also received attention from his office. Data collected by the American Society for Testing Materials, the American Society of Civil Engineers, The Bureau of Standards, and other such professional organizations were published in the Bulletin.<sup>8</sup> When the Department of Agriculture was reorganized in 1915, the Office of Public Roads was given the responsibility of all engineering within the Department. With this new objective, the office added "and Rural Engineering" to its title. The following year the Federal Road Act was passed and again new objectives



were drafted. The office was responsible to educate the public by lectures, to publish findings of scientific research, to build model roads, to engage in research, to improve existing methods of construction and testing of construction materials, and to administer the Federal Road Act of 1916.<sup>9</sup>

Since 1904 Congress annually had attempted to pass federal appropriations for road construction. The arguments advanced against federal aid by congressmen opposed to such a bill included the reduction in states rights, and a statement that any large appropriation not only would result in isolated cases of pork barrels but also would not improve the general condition of roads. However, petitions, letters, and lobbyists representing the good roads movement spread Congressmen to introduce forty-nine bills during the Sixty-third Congress alone. To resolve the problem, a joint Congressional committee was appointed to study the many possible solutions. The final report was submitted on January 21, 1915. Statistics garnered on the condition of rural highways, highway expenditures, comparative cost of road construction, state debts incurred from highway construction, and the possible effect federal aid would have on existing transportation was impressively in favor of federal aid.<sup>10</sup>

The chairman of the committee on roads presented a proposed bill for federal aid on January 6, 1916. This bill, after debate and approval by both houses of Congress, was signed by President Woodrow Wilson on July 11, 1916. The admended title was "An Act to provide that the United States shall aid the States in the construction of rural post roads, and for other purposes." For the sake of brevity it was most often called simply "The Federal-Aid Road Act." The bill

authorized the Secretary of Agriculture to work with state highway departments to determine which rural post roads should be improved and what type of material would be used in construction. However, before any state could receive funds, it would have to agree to the constitutionality of the law. To give a wider application to the bill, rural post roads were redefined to include all routes over which the United States mail was carried and any future routes that might be used for delivery. A rural area was defined as a place with a population of less than 2,500 inhabitants, unless the houses were separated by more than two hundred feet. Moreover, any highway that was constructed under the act would have to be free of tolls.<sup>11</sup>

The total appropriation, providing matching funds to be spread out over five fiscal years, was \$75,000,000. The first year, ending June 30, 1917, \$5,000,000 could be spent, and each year thereafter another \$5,000,000 would be added to the amount until 1921 the total would be \$25,000,000. Allocation to a state was based on its percentage of land area, its population, and its miles of rural delivery routes in relationship to the national average. An additional \$10,000,000 was allocated for construction and maintenance of roads in national forests, roads to be used primarily by companies extracting national resources from public lands.<sup>2</sup>

From this meager beginning, federal aid to state highway construction has grown to mammoth proportions. All segments of society were eager to usher in the affluent, mobile society, and to transport this movement, concrete and asphalt carpets soon stretched across the nation.

An amendment of the original Federal Road Act was added in 1919. The Post Office Appropriation Act provided for an additional expenditure

of \$200,000,000 for construction and maintenance of post roads. The first year \$50,000,000 would be allocated, and \$75,000,000 would be spent in the two following fiscal years. Moreover, funds for forest roads were approved: \$9,000,000 to be equally divided between the three fiscal years. To speed construction of new highways and to protect the trucking industry's expanding market, the act also provided that surplus war material and equipment that could be used for road construction would be transferred to the Department of Agriculture. By the fall of 1921 that department had received 24,353 vehicles and a large quantity of spare parts. The various state highway departments eagerly accepted this equipment and adapted it to road construction: ambulances became portable offices and light delivery wagons; trucks were altered to become snowplows and scrapers; and other vehicles were fitted with watering tanks, dump beds, and benches. With the two major obstacles to road building during the war conquered, the golden era of road construction <sup>13</sup> began. ✓

During the 1920s federal funding spurred highway construction. Annual investments in roads changed from millions to billions. As each section of federal-aid highway was completed, the demand for feeder roads from farmers, businessmen, and truckers increased. Although the need for improved highways was apparent, most states and counties did not have a general transportation policy. A county or state highway would be improved to the boundary without regard to the condition of the road across the line; this inhibited inter-county and interstate traffic. Highways were constructed parallel to railroads or water routes, but at the same time remote areas were neglected. Moreover, the insufficient number of interstate highway routes was acute. The military ✓

had struggled to transport men and supplies across the nation, and Congress felt compelled to prepare for the next national emergency by incorporating strategic military transportation routes into the federal highway systems. Congress recognized these inconsistencies and believed inadequate planning was inherent where state and local governments controlled transportation policies. In an effort to eliminate such pedestrian planning, the Federal Highway Act of 1921 limited the amount of roads that could be improved to seven percent of the total rural mileage in a state and approved aid only to those roads that were designed for interstate or inter-county traffic.<sup>14</sup>

Highway appropriations of \$75,000,000 for fiscal year 1922 was approximately the annual average for the next eight years. State and local governments during the same period spent in excess of \$17,000,000,000 for construction and maintenance to raise the total highway expenditures to more than \$20,000,000,000 for the decade ending in 1931. However, the depression provided an opportunity for a great increase in federal and state funding. By 1930 the total federal aid allocated to highway construction amounted to \$790,000,000. The condition of the nation's economy during the depression resulted in emergency governmental funding for public works. Increased highway construction provided an outlet for governmental spending and thousands of jobs for the unemployed. President Franklin D. Roosevelt's social betterment policies poured out more than \$2,200,000,000 of federal money for highway improvement. However, interstate highways received only a small percentage of the funding, while most states boasted improved farm-to-market roadbeds.<sup>15</sup>

From 1940 to 1943 road construction was at a standstill. The war

consumed the energies of the nation, and the increased war traffic and neglect of highway maintenance brought about the passage of the Federal Aid Highway Act in 1944. This measure contained many of the same elements as the Bill of 1921, but added funds for urban centers with a population of more than 5000 and established an interstate system that was not to be more than 41,000 miles in length. A total of \$1,500,000,000 was allocated to be doled out to the states over a three-year period. The urban system was to receive twenty-five percent of the allocation, the secondary system thirty percent, and the primary rural highways, which included the Interstate System, would receive the remaining forty-five percent. For the first time a comprehensive, federal highway system was planned.<sup>16</sup>

The annual federal expenditures remained fairly constant until the passage of the Federal Aid Act of 1956. Congress believed that the \$500,000,000 average expenditure was not enough for a rapid completion of the interstate system and additional funds were made available. A total of \$24,625,000,000 was allocated for fiscal years 1957-1969. Funds were distributed under the same percentage guidelines as in the Act of 1944, but the cost of constructing the Interstate System to the states was reduced. Instead of providing matching funds, the states would pay only ten percent of the total cost incurred in construction of interstate routes. This vast Interstate System was to be completed by 1972, but in 1968 an additional 1500 miles was added to the 41,000 miles that had been planned initially, and the completion date was moved forward to 1977. Moreover, the cost had risen from \$24,000,000,000 to more than \$100,000,000,000, and the estimates for final completion continued to rise. The limited-access super highways were planned with the

purpose of providing a transportation system that would accommodate the estimated traffic flow that would develop by 1975. Again the government underestimated the growth of private automobile travel and of commercial motor freighting.<sup>17</sup>

Funding for this expensive network of roads came by creation of the Highway Trust Fund. Taxes on lubricating oils, tires, and gasoline, combined with excise taxes paid by buses and trucks, provided a users' tax to build new highways. Thus the fund was self-perpetuating; as new highways were built, more automobile miles were logged, and more funds were collected to build more highways.

The demand for new and improved highways, automobiles, and trucks appeared insatiable. In 1971 alone more than \$20,000,000,000 was spent on highways, more than \$27,000,000,000 on new vehicles, and more than one trillion miles were traveled. The farmer, tourist, and trucker had been pulled out of the mud, the city dweller had been relocated in suburbia, and the trust fund had been generating more spendable income. By 1973 the Federal Highway Trust Fund established in 1956 had spent \$63,000,000,000 of which more than \$40,000,000,000 had gone for construction of the Interstate System. The Interstate System received the bulk of federal expenditures, but the remainder of the primary, secondary, and urban systems had expanded to include 870,000 miles. Moreover, in 1974 the matching-fund status employed on the other-than-Interstate-construction was changed. The state's burden was reduced to thirty percent; starting with fiscal year 1976, the primary system would include those routes that extend the Interstate into urban areas the major traffic routes that feed large volumes of traffic to existing Interstate routes.

FOOTNOTES

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<sup>2</sup>Report of the New Jersey Commission of Public Roads, 1900, p. 81.

<sup>3</sup>Ewing Galloway, "The Way to Good Roads," Collier's Automobile Section, LII, No. 1 (January 10, 1914), pp. 5-6.

<sup>4</sup>Department of Commerce, Bureau of Public Roads, Highway Statistics Summary of 1955, tables HF-120, HF-200.

<sup>5</sup>Congressional Record, Vol. XXIV, January 26, 1893, p. 883.

<sup>6</sup>Report of the Secretary of Agriculture, 1893 (Washington: Government Printing Office, 1894), p. 36.

<sup>7</sup>Department of Agriculture, Office of Road Inquiry, Bulletin No. 1 (Washington: Government Printing Office, 1893), p. 5.

<sup>8</sup>Ibid., pp. 5-7.

<sup>9</sup>Office of the Public Roads, Federal Road Act, Regulations for Carrying Out, Circular No. 65 (Washington: Government Printing Office, 1916).

<sup>10</sup>George M. Smerk, Urban Transportation: The Federal Role (Bloomington, Indiana: Indiana University Press, 1965), p. 121.

<sup>11</sup>Ibid., pp. 121-122.

<sup>12</sup>Ibid.

<sup>13</sup>House Report, Report No. 451. Sixty-seventh Congress, 1st Session, Vol. XXI, pp. 1-11.

<sup>14</sup>Ibid.

<sup>15</sup>Ibid.

<sup>16</sup>U. S. Department of Commerce, Bureau of Public Roads, Highway Statistics: Summary to 1945 (Washington: U. S. Government Printing Office, 1947).

<sup>17</sup> Ibid.; Frank H. Mossman and Newton Morton, Principles of Transportation (New York: The Ronald Press, 1957), pp. 406-411.

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### CHAPTER III

#### UNRESTRAINED COMPETITION: A CASE FOR GOVERNMENTAL REGULATION?

The long-haul trucking industry developed in a direct relationship with the interstate highway improvements and the decline of competing rail transportation. The initial growth of the long haul came because of congested railroads, with truckers hauling the overflow. However, with peacetime, the truckers found that less-than-carload freight shipment rates charged by railroads were sufficiently high that truck transportation could compete when parallel, hard-surfaced, highway routes existed. During the 1920s railroads welcomed extended highway freight routes to provide local shipment to railheads and to transport less-than-carload short hauls. However, trucking offered speed and flexibility for door-to-door delivery which attracted first-class freight and greatly reduced the rail haulage of high-grade, profitable shipments.

The Department of Agriculture submitted a report to Congress in 1922 debating the relative merits of water, rail, and highway transportation and the role the federal government should assume in regulation and coordination of all phases of interstate transportation. Since 1917 the motor trucks had made great advances and was rapidly increasing its freight-ton-miles each year. The farmer especially had felt the influence of trucking; the average cost to haul corn, wheat, and

cotton from farm to rail shipping points per ton-mile in 1918 had been reduced respectively from thirty-three, thirty, and forty-eight cents to fourteen, fifteen, and eighteen cents by 1921. The truck extended the economic zone from which farmers could profitably raise cash crops, and the average haul reflected this radial growth; farm-to-railroad shipments in 1918 averaged a total of 11.3 miles, while in 1921 the average loaded truck haul was 47.7 miles. These averages were for all trucks traveling on Connecticut's highway system and were not an exact description of the nationwide impact, but they represented a marked increase in market mobility. The changing of markets varied with each agricultural zone.

An indication of this change came in the corn belt. Eight hundred and thirty-one farmers who owned trucks were surveyed by the Department. Almost twenty-five percent had changed their markets after acquiring a truck. The average distance to market had increased from 6.9 miles to 17.6 miles; however, farmers had changed their markets incidental to the purchase of motorized transport. According to one survey taken in the 1920s, more than ninety percent of the farmers who brought trucks gave speed-to-market as the principal advantage that trucks had over horses, while more than fifty percent reported that the greatest disadvantage of truck-to-market freighting was the poor condition of roads.

Investment in trucks followed the general trend of farmers purchasing motorized machinery to increase production following World War I. By 1920, the total number of trucks in active use on American farms numbered 139,000, a total that reached 900,000 by the end of the decade.<sup>1</sup>

The great influx of motor trucking by farmers had been predicted by the Department of Agriculture. Motor trucks, according to the studies,

would provide a valuable addition to rail transportation in farm-to-market traffic, hauling railroad surplus, and transporting short hauls of less than carload lots and perishable goods. Intercity motor freighting operations would be limited to goods that required speedy door-to-door delivery and in areas where railroads would not offer competing routes. The Department based its conclusions on Connecticut's traffic census taken by a highway economist in the fall of 1921. Comparing operating cost of railroads with motor trucks per ton-mile shipments for distances from 30 miles to 243 miles, the economist had found the limit for economical truck shipments. According to his conclusions, trucks could not effectively compete in haulage of third; and fourth-class freight. However, in second-class freighting, trucks provided cheaper rates for distances up to forty-seven miles, in first class up to seventy-two miles, and in multiples of first class, trucks held a decided rate advantage up to 139 miles. The railroad companies were not able to reduce operating costs of local freight trains nor overhead costs at the freight depots; thus their profits declined as improved highways, funded with federal and state monies, provided a more extensive network of local, regional, and interstate routes for the trucking industry.<sup>2</sup> During the 1920s highways improved, and trucking was able to attract more of the transportation dollar away from the railroads. The trend of competition between the two major transportation modes continued as the Department of Agriculture had predicted, except trucks were able to woo more freight and to profit from longer hauls. As a result carriers flourished.

The initial investment was low, overhead costs for small operators could be held at a minimum, and many farmers trucked to provide off-

season income. The trucking industry presented an economic paradox during a technological revolution; the economy of scale did not apply to this new form of freighting. Larger companies could not compete with an independent trucker because a large-scale operation could be supported only with extensive and expensive terminal and vehicle maintenance facilities. Moreover, administrative staff, dock workers, and mechanics increased operational overhead. The railroads were at more of a disadvantage when competing with an independent trucker. The railroads not only failed to compete with the shipping rates for first-class goods, but also could not provide the speed and flexibility offered by the truck.

Railroads, the mainstay of American transportation for a century, chaffed under the intense competition offered by trucking. Interstate Commerce Commission's regulations setting rates greatly reduced profits on bulk items that were not hauled by truck and kept low-volume and high-profit, first-class rates at a level at which trucks could compete. The railroad companies also reversed their traditional economic and political philosophy and argued against public subsidies for the building of roadways. Using the same arguments that had been levied against the railroad companies at the turn of the century, railroad spokesmen agitated for reduced governmental funding for highways or for a greatly increased user tax to be initiated for maintenance and construction of roads. The increased taxes would raise highway freight rates, and the railroad would be able to compete on equal ground.

The railroad lobby found new interest groups that would support a reduction in highway funds or an increase in user taxes. However, the attack against the injustice of regulating one mode of transportation

and allowing unrestricted commerce by other forms of transportation found supporters among the Washington bureaucrats and among larger trucking firms wishing to compete with their strongest selling point-- service. The rationale for regulation of the trucking industry was originally equality: either deregulate the railroads or regulate the trucks. Officials in Washington believed that because of the nature of railroad construction a monopoly existed, and, for the public good, rates had to be set. The trucking industry by its nature was competitive. The shipper was able to choose from among the extreme limits offered; large firms provided excellent and reliable service, while independent truckers specialized in low freight rates.

In 1925 the National Association of Railroad and Public Utilities, in support of the special interest of railroads, used its political strength to get a bill introduced in Congress calling for the regulation of inter-state motor freighting.<sup>3</sup> The bill was defeated, but was re-introduced during each of the next ten congressional sessions until it passed. In 1926 the Interstate Commerce Commission investigated the possibility of extending its regulatory powers to include highway transportation. The Commission, after concluding its study on the economic impact of unregulated highway traffic on the railroads, determined it would not be in the best interest of the public to regulate interstate highway freight.<sup>4</sup>

By 1932 the Interstate Commerce Commission had altered its basic philosophy to include regulating highway freight. Railroads had been attacked for price gouging and monopolistic practices, and had to be regulated for the public good. Because the same conditions did not exist among the trucking industry and because the railroad lobbyists

and large trucking firms were applying pressure for regulation, a new rationale for regulation surfaced: "to minimize injurious consequences by restraining competition within reasonable limits."<sup>5</sup> These so-called "destructive competitive practices" were a result of the general state of the American economy during the depression. The high rate of unemployment that lingered through the 1930s left many workers in the transportation field without jobs. Owner-operators in the trucking industry, faced with reduced profits, had to lower their overhead or go bankrupt. Moreover, many drivers who had been fired purchased trucks on credit and became owner-operators--and rate-cutting wars ensued. Businessmen enjoyed the lower rates. Warehouse and store stock could be held to a minimum when a fast and cheap trucking service was available.<sup>6</sup>

President Franklin D. Roosevelt's economic policies provided for price stabilization to ensure that established firms could make a reasonable profit in order that they might stay in business and not add to the growing number of bankruptcies. However, the cost for transporting farm commodities was held at a minimum to ensure low-cost food to the already hungry masses. Railroads suffered losses on many shipments because the Interstate Commerce Commission insisted on keeping bulk rates at a low level. Furthermore, the trucking industry had taken a large portion of the low-volume, high-profit, first-class traffic, further reducing the economic stability of the railroads. The Commission concluded that the motor truck had an unfair advantage; that all three major modes of transportation--water, rail, and highway--should be coordinated by regulation; and that the "existing rail and water facilities in which a large amount of permanent capital is

invested should be used to the greatest possible extent...."<sup>7</sup>

The Interstate Commerce Commission argued for authority to restrict new entries into interstate freight hauling. By reducing the duplication of service by highway carriers when other modes of freight transportation or a trucking service was already available, destructive rate cutting could be avoided. The rationale for such regulation was protection of the national transportation system for the public good. Investments in transportation services should be made only when there was a public need, and if the government did not restrict those investments the duplication of services would "...deplete the revenues of other carriers, thereby weakening the financial structure of the national transportation system."<sup>8</sup> The Commission concluded that a physical excess capacity would develop in the trucking industry, resulting in intense competition, instability, and reduction of the ability of the trucking industry to respond to the public need.<sup>9</sup>

Congress responded to the Interstate Commerce Commission's recommendations by passing The Motor Carrier Act, which became law on August 9, 1935. The Act was later incorporated as Part II in The Interstate Commerce Act of 1940 and contained approximately the same provisions as the original. The Interstate Commerce Commission was charged with regulation of the three major classes of motor transport: common carriers that were available for hire on a first-come first-serve basis, contract carriers that provided specialized service for a single commodity, and private carriers that freighted privately owned goods and were not engaged in transporting property for profit.<sup>9</sup>

Common carriers, engaged in the most competitive phase of trucking, became the most regulated of the three classes. Minimum standards

were set for employees' qualifications, safety, and equipment, and maximum standards for hours worked per day. Report forms and uniform accounting methods could be required of the common carriers to make the regulation of the large number of carriers more efficient. All interstate freighting concerns had to prove that the route and service provided was a public convenience and necessity to obtain the Commission's operating certificate. However, under the "grandfather clause," a firm that had provided common carrier service before June 2, 1935, and had operated until the time it applied for a certificate would receive permission to operate over the same route without proof of public need. The certificates issued would remain in force indefinitely unless the carrier violated the Interstate Act or was guilty of violation of a Commission directive.<sup>10</sup> Consolidations or mergers involving more than twenty trucks would have to be approved by the Commission and would be approved only if the unification was not harmful to public interest.<sup>11</sup>

Rates had to be published by the carrier subject to the approval of the Commission. If these rates were considered unreasonable and discriminatory, the Commission could suspend them for a period of up to seven months and set minimum and maximum rates. Any change in rates by common carriers had to be published thirty days before they came into effect. Each firm was required to insure its trucks according to the protection the Commission deemed necessary to cover loss or damage to cargo, property damage, injuries, or claims by third parties.<sup>12</sup>

Contract carriers were regulated under similar provisions. Permits were issued if the freighting was not against public interest, but the burden of proving "public convenience and necessity" was not required. Provisions for insurance also were relaxed; liability for death or



injury and for property damage other than cargo were the only restrictions. The Commission could not set maximum rates but was authorized to set minimum rates. Furthermore, contract carriers did not have to publish their actual rates but only their minimum rates (an amendment to the Act in 1957 required contract carriers to publish their actual rates so that they would not gain unfair competitive advantages over common carriers).<sup>13</sup>

Regulations for not-for-hire carriers or private carriers were less than for the other two classes. The emphasis was not on restricting competition with other modes of transportation but on safety of operation. Hours of driving, safety of operation, and minimum standards for equipment came under the watchful eye of the Commission. Included under these same regulations for private carriers was the exempt class. All trucks owned and operated by farmers engaged in agricultural pursuits and not engaged in transport for hire were exempt from governmental regulations. Agricultural cooperatives, according to the legal definition of such cooperatives in the Agricultural Marketing Act, were exempt, as were all vehicles carrying livestock, shellfish, fish, agricultural commodities, and, by an amendment in 1952, horticultural products. This included all agricultural commodities that had not been processed or manufactured for resale.<sup>14</sup>

The Motor Carrier Act of 1935 was controversial from the day of its passage. Support for the act came from railroads, major trucking firms, and the Interstate Commerce Commission; the most vocal attacks on the Commission's policy came from the independent truckers, transportation economists, and consumer groups. Railroads gained from the act, for the regulations artificially raised rates, limited competition,

and added overhead cost to highway transportation, thus inflating highway freighting cost and putting the railroads in a position to compete with freight rates and service. Larger trucking firms supported regulation to give them a competitive edge over independent truckers in the absence of rate competition. Furthermore, the cost of proving "public convenience and necessity," when other trucking interest opposed the issuance of a Commission certificate, remained sufficiently high to discourage small firms from entering the trucking business. Large freighting operations and trucking organizations traditionally maintained lobbyists who protected and extended their influence in regulation of rates, approval of mergers, and extension of routes, thereby eliminating much of the bureaucratic "red tape," expensive delays, and competition. Attorneys' fees, to process appeals when certificates are refused or to fight a case which has been contested, often ran into the thousands of dollars, and in cases where large trucking firms were attempting to establish new routes, \$40,000 fees were common.<sup>15</sup>

Increased entry costs, special interest, and established rates reduced the numbers of owner-operators in the trucking business, but did not cause a heavy concentration of large firms. Entry into trucking was greatly restricted by regulation for the common carrier; however, the owner-operator in many cases became a contract carrier or hauled exempt cargoes. After fifteen years of regulation, firms operating under common carrier certificates numbered 16,881 and freighted fifty percent of the long haul ton miles. The largest firms, those that make an annual revenue of more than \$200,000, designed as Class I carriers by the Interstate Commerce Commission, collected seventy-three percent of the total trucking revenue. In areas where special equipment was

required to transport goods, the concentration was more pronounced. Automobiles, liquid petroleum products, and household goods freighting was controlled by a few major firms; fewer than sixty firms transported more than fifty percent of the freight. However, in comparison to other types of major industry, trucking had remained relatively unconcentrated.<sup>16</sup>

Small firms and owner-operators were placed at a competitive disadvantage not by economics of scale but by their inability to compete with lower rates. With the passage of the Motor Carrier Act came a plethora of trucking organizations, sponsored by large firms, to promote the interest of regulated highway freighting. Many of the rewards gained by these organizations could be equally profitable for small firms. However, the establishment of rate bureaus, to set a uniform standard of rates for a given region, destroyed individual initiative to reduce rates according to demand and profit margin. The rate bureaus originally operated illegally in violation of the Sherman Anti-Trust Law, for their sole function was to organize a system of price fixing. Yet the government failed to prosecute this open violation of the Interstate Commerce Act. However, in 1948 with the passage of the Reed-Bulwinkle Act, the once illegal practice was sanctioned by the Commission.<sup>17</sup>

The Interstate Commerce Commission and members of the rate bureaus supported such price fixing for the purpose of reducing the cost of each firm printing a separate schedule of rates, offering price stability, and reducing cut-throat competition. The Reed-Bulwinkle amendment guaranteed that independent rate setting would not be restricted, nor would the ICC allow bureaus to set rates that were not within the

interest of the general public. However, independent actions were only given perfunctory genuflections by the commission and "...tolerated so long as it falls short of promoting genuine rate competition."<sup>18</sup> Rate bureaus soon exerted their power by dominating rate making. Fees and dues paid by members of the eighty bureaus were used to promote rate changes by hiring lobbyists, printing bureau publications, and challenging any independent rate proposals. Such rate changes had to be defended, and the burden of proof, as to public good, rested with the firm that made the proposal. Rate bureaus use their extensive legal staffs and their equally extensive budgets (the Rocky Mountain Motor Tariff Bureau collected \$1,700,000 in 1968) to challenge most rate changes by independents. The yearly challenges against rate reductions increased from 567 in 1946 to 5170 in 1952. Some of the requests for rate suspensions came from shippers but more than sixty percent originated from other trucking interests. The use of such a system reduced competition by eliminating rate cuts by the independent and small-volume truckers who could not afford the legal fees to defend their position. The result has been that up to eighty percent of the contested rate changes are withdrawn before the Commission holds its hearings.<sup>19</sup>

The Interstate Commerce Commission has stopped so-called destructive competition between transportation modes but at the same time freighting costs have not been reduced according to demand, nor has any real competition developed between rail, highway, and water transportation. The inherent advantage of each mode of transport has been neglected for artificial rate schedules proposed by special interests groups. Truckers gain their advantage in transporting for distances up to one hundred miles for most commodities and have advantages for special

classes of goods such as perishable and household effects for longer hauls. However, the rate structure fails to give sufficient profits to railroads and water carriers for bulk items to make a profit, thus forcing rates for low-volume, high-cost items to increase so that the trucking industry can compete on long hauls.<sup>20</sup> Moreover, low rates on natural resources and high rates on manufactured goods become an incentive for industry to locate close to urban centers instead of building a plant adjacent to the source of raw material. Therefore more transportation carriers are needed, and more roadway has to be constructed and maintained, and the consumer pays the cost in higher freight charges.<sup>21</sup>

FOOTNOTES

<sup>1</sup>House Doc., Doc. No. 408, Sixty-seventh Congress, 1st Session, Vol. VII, pp. 348-365.

<sup>2</sup>Ibid.

<sup>3</sup>Senate Doc., Doc. No. 1734, Sixty-first Congress, 1st Session, Vol. XI, p. 402.

<sup>4</sup>Motor Bus and Truck Operation, 140 I. C. C. 685.

<sup>5</sup>Coordination of Motor Transportation, 182 I. C. C. 263.

<sup>6</sup>John R. Meyer, Merton J. Peck, John Stenason and Charles Zwick, The Economics of Competition in the Transportation Industries (Cambridge, Mass.: Harvard University Press, 1964), pp. 215-217.

<sup>7</sup>195 I. C. C. 5, 45, p. 377.

<sup>8</sup>Ibid., p. 376.

<sup>9</sup>Ibid., pp. 376-377.

<sup>10</sup>Historical Development of Transport Coordination and Integration in the United States (Washington: U. S. Government Printing Office, 1950), pp. 92-101; see also Frank H. Mossman and Newton Morton, Principles of Transportation (New York: The Ronald Press, 1957), pp. 80-96.

<sup>11</sup>Rock Island Motor Transit Company vs. United States, 55 M. C. C. 567.

<sup>12</sup>Motor Bus and Truck Operation, 140 I. C. C. 685.

<sup>13</sup>Ibid.

<sup>14</sup>John R. Meyer, Merton J. Peck, John Stenason, and Charles Zwick, The Economics of Competition in the Transportation Industries (Cambridge, Mass.: Harvard University Press, 1964), pp. 10-14.

<sup>15</sup>James C. Nelson, "The Effects of Entry Control in Surface Transport," James C. Nelson, et al., Transportation Economics (New York: Bureau of Economic Research, 1965), p. 413.

<sup>16</sup>Walter Adams and James Hendry, Trucking, Mergers, Concentration and Small Business: An Analysis of Interstate Commerce Commission Policy, 1950-1956 (Washington: U. S. Government Printing Office, 1957), p. 32.

<sup>17</sup> Robert C. Fellmeth, The Interstate Commerce Commission (New York: Grossman Publishers, 1970), pp. 136-141.

<sup>18</sup> Walter Adams, "The Role of Competition in the Regulated Industries," American Economic Review, XLVII, No. 2 (May, 1958), p. 533.

<sup>19</sup> Traffic World (January 28, 1956), p. 21.

<sup>20</sup> Association of American Railroads, Highway Motor Transportation: Report of Subcommittee on Motor Transport of the Railroad for the Study of Transportation (Washington: Association of American Railroads, 1945), p. 101.

<sup>21</sup> Bureau of Public Roads, Highways and Economics and Social Changes (Washington: U. S. Government Printing Office, 1964), p. 58.

## CHAPTER IV

### RUBBER ON CONCRETE

The emergence of long-haul trucking awaited the construction of roadways, the development of machines and tires, and the economic necessity for extending urban motor freighting to the countryside. The early long-haul was used primarily to expose how dreadful were the roads, how dependable were the trucks, and the durability of tires. The first successful transcontinental run was made in 1911 by the Sauger truck, but the two month test showed the poor conditions of roads, bridges, and culverts and the enduring strength of drivers. Subsequent land voyages were undertaken for the same purpose, and world records were claimed by each truck manufacturer as the total time for the trip was reduced from months and weeks, to days and hours. Truckers should have received world records for repairing and over-hauling and pushing and pulling an unwilling mechanical beast across a continent.<sup>1</sup>

During the expedition in 1916 against Pancho Villa, the major problem was inadequate tires. At the turn of the century heavy trucks used steel or wooden tires, but with the improvements in tire casting and rim design, they soon rode on solid rubber tires. As long as trucks maintained speeds of less than ten miles per hour and were traveling on good roadways, solid tires were serviceable. In sand, mud, or loose gravel, solid tires, because of their narrow width, would either sink, become stuck, or lose traction. At speeds approaching



fifteen miles per hour, a truck with solid tires would vibrate, not only shaking the cargo to such an extent that much of it was damaged beyond salvage, but also limiting the ability of the driver to control the vehicle. The ill-effects of the solid tire limited the speed<sup>d</sup> of service for long-distance cargo hauling, and greatly increased the rate of kidney and back disorders, not to mention the many cases of ~~shipped~~<sup>shipped</sup> teeth among operators of such "bone rattlers." Governmental agencies that maintained roads frequently used by trucks added to the complaints levied at solid tires. The lack of absorbing qualities destroyed road surfaces, and in many regions trucks were restricted from using surfaced highways.

Pneumatic tires offered an alternative. In the 1890s bicycle makers had utilized air-filled tires with a rubber and cotton exterior and double intertubes to provide a cushioned ride. These tires were adapted to the automobile with little change in construction or size. However the extra weight and increased speed of the automobile reduced tire life; improvements in tread design and wider tires had to be introduced before the pneumatic could become standard equipment on the automobile. The softer ride and increased handling ability appealed to the American consumer, and by 1916 one-half of all automobile tires sold were pneumatic. The same convenience was not offered to the truck owner. The cloth, reinforced pneumatics could not withstand heavy loads and the resulting punishment that came from the chuckhole-riddled roads. The same year that automobile pneumatics outsold solid tires, truck owners bought one pneumatic for every sixty solids.<sup>2</sup> ✓

Goodyear Tire and Rubber Company of Akron, Ohio, developed a new design for pneumatics that used a strong rubber cord substitute for

cloth reinforcement that could withstand the demands placed on tires by heavy trucks. In order to test the tire under actual long-haul conditions, P. W. Litchfield, Goodyear's plant manager, started a regular trucking route from Akron to Boston. The first truck, dubbed the Wing-foot Express in honor of the Goodyear Trademark, left Akron on its first non-stop trip on April 9, 1917. The scheduled time for the run was seven days, which proved to be an optimistic forecast. The Goodyear Company's press releases reported that the trucking route was established not only to promote the higher speeds, greater economy, increased traction, and smoother ride offered by the new corded pneumatic tires, but also to engage in carrying tires from Akron to the Eastern market and return to Akron with cotton fabric from Goodyear's mills at Killingly, Connecticut.<sup>3</sup>

As with the sailors, soldiers of fortune, and explorers of earlier romantic times, two single men were chosen for the adventure that would take them over the 700 miles from the urban pavements of Akron to the distant East. Harry Smeltzer had gained some experience driving a truck equipped with cord pneumatics but only on short hauls. His traveling companion, Harry Apple, had no such advantage. The new Packard truck used for the first trip had no special equipment except cord pneumatics inflated to one hundred and ten pounds pressure and a sleeping compartment that ran the width of the cab. On the first trip the only cargo was extra tires, oil, gasoline, and an air compressor. Two Packard cars accompanied Smeltzer and Apple on the trip to help in case of breakdown and to provide transportation for the Goodyear public relations team. Goodyear provided a tire engineer, garage manager, and race car driver, and Packard sent along two factory engineers to repair the truck.<sup>4</sup>

Early on the morning of April 9, 1917, this historic caravan embarked on the first major interstate trucking enterprise. The three vehicles sped through the Ohio countryside for three hours logging an uneventful 25 miles, until the pavement ran out at Edinburg. After negotiating the muddy road for one mile, the truck gave up the struggle. For the rest of the day the crew constructed a platform from material garnered from a farmer's rail fence, but still failed to get the truck out of the mud. Relying on the custom that had been established from early touring days, the stranded motorists spent the night at a farmer's house. The following morning, with the help of a borrowed winch, the truck continued.<sup>5</sup>

Mud was not the most difficult hurdle to overcome on the journey. The rough roads and long hours strained both men and machine. On an average, for every fifty miles of travel one of the pneumatics would blow out. At Jeanette, Pennsylvania, the truck engine failed, and the trip eastward had to be postponed for five days to wait for a new engine to arrive and then to be installed. Even with the new motor and the assistance of the factory mechanics, the engine failed and was overhauled in Philadelphia and again in Boston, causing further delays. The Packard truck, with its travel-weary crew, triumphantly entered Killingly, Connecticut, sixteen days behind schedule.<sup>6</sup>

Goodyear had provided advance publicity and a band was engaged to give a grand welcome to the pioneer voyagers. Smeltzer and Apple, veterans of the open road, enjoyed a relatively easy five-day return trip to Akron. Subsequent trips were made with cargoes of rubber products for the East, with return loads of cotton fabric. By the third trip the seven-day schedule was met, and by summer a five-day round

trip was standard. Although the first trip consumed twenty-eight days and twenty-eight tires, later trips proved that not only were pneumatics superior to solid tires but also that long-haul trucking was economically feasible. Furthermore, the press releases of the Akron-Boston Express route and the advertisement scrolled in bold letters on Goodyear trucks helped popularize new tires and interstate trucking.<sup>7</sup>

Goodyear continued to promote its tires with the aid of long-distance trucking runs. In 1918 truck convoys carried eighteen tons of tires to Chicago, Boy Scouts on a 3,000 mile tour of the South, and Red Cross supplies from Chicago to Baltimore. Each trip provided excellent free advertisement for a new cord pneumatic tire and increased interest in interstate trucking. During the fall of the same year Goodyear capped its advertising campaign with a delivery of aircraft tires to San Francisco. The struggle across the nation tested the mettle of men and machine, but did not show a promise for future transcontinental trucking. The trucks logged 7,763 miles, destroyed thirty-six bridges, and traveled more miles over unimproved trails than surfaced roads.<sup>8</sup>

As Goodyear tested tires in America, the United States Army tested trucks under wartime conditions in Europe. Many of the trucks and men utilized in the campaign against Pancho Villa in Mexico made their way to Europe and were engaged in general transport duties under the command of "Black Jack" Pershing. With the creation of the Motor Transport Corps, the Army committed its transportation cartage to the truck. General Pershing estimated that 50,000 trucks would be needed, but throughout the conflict his request for additional vehicles was lost in the Department of War's red tape and stalled by the inability of the Merchant Marine to ship needed war supplies.<sup>9</sup>

Pershing was shocked that the United States, the largest producer of motorized vehicles in the world, could not fill his request for more trucks and that when transportation bottlenecks developed he had to borrow trucks from the French. Moreover, in the summer of 1918 Pershing was refused the use of the French vehicles because the French were in the process of asking the same favor from Americans. The condition became critical when a shortage of ambulances made the transfer of wounded from the front lines to field hospitals almost impossible. The problem was compounded when twenty new hospital units arrived without any means to transport the wounded. During the second year of the war many of the 200 different makes and models of American trucks that served in the war were driven cross-country to the docks instead of being transported by rail, thus speeding shipments overseas.<sup>10</sup>

The difficulties of transportation in a war zone during World War I seemed insurmountable. The logistics of freighting men, munitions, and food to the front lines and maintaining 200 odd makes and models of trucks, which had more than 60,000 separate parts, taxed the Motor Corps. A large majority of the drivers and mechanics had little if any experience in transportation. Efforts to recruit drivers met with some success; the Motor Truck Club of America organized a recruiting drive which resulted in 1400 chauffeurs being mustered into the Army. But most drivers gained their experience behind the wheel of a truck on the front lines. Early in the war truckers developed many of the habits that would be the trademark of the future long-haul drivers.<sup>11</sup>

Drivers faced long hours of monotonous driving over battle-scared roads made practically impassable by the many vehicles that had gouged the earthen surface into deep ruts. Open cabs provided scant protection

against the elements, and the shortage of trucks left little time for exhausted drivers to rest. Hours stretched into days as long supply trains schuttled to and from supply depots and front lines. One such group of men, members of the Hundred and Seventeenth Supply Train of Texas, symbolized the romantic and often colorful nature that became the trademark of Army truckers. In September of 1918, as Pershing lamented his critical shortage of trucks, the Hundred and Seventeenth inched its way toward the French front. Each of the 200 trucks were manned by a pair of Texas rebels, including a mixture of experience-hardened veterans and those that had "been used to the soft life".<sup>12</sup>

Convoy duty meant days and nights of travel without knowledge of when or where the trip might end. At night truckers, running without lights, followed the tailgate of the truck in front, mesmerizing the drivers and adding to the dream-like quality of events brought about by mental and physical fatigue. The long line of trucks moving at a slow pace would halt, drivers would stretch numb muscles and consume what rations were available, and then at the sound of a whistle resume their trip to some unknown destination. Cognac-filled canteens gave some relief from the cold, driving rain that soaked the cargo, drenched the drivers, and made the roads a sea of mud. Constant vibration and bone-jarring lurches of the steering wheel sapped the men's strength but relieved the monotony of constant driving.<sup>13</sup> As drivers delivered much-needed supplies to the front lines and returned the wounded to hospitals, the American press captured the heroic and romantic nature of the newly created Motor Corps and predicted the coming of a transportation revolution.

The favorable image of this new form of transportation was easily

contrasted with the monopolistic tendencies of railroads. Not only did the truck replace the Army horse, but also, with the great demand placed the iron horse on short hauls. The routes most often began in the major urban manufacturing centers and radiated out to the smaller cities within fifty miles distance. A few exceptions to that rule were trucks that plied between the large industrial cities along the eastern seaboard. However, the greatest effect brought about by trucking operations during the war came with the delivery of farm products to the cities to alleviate the food shortage caused by congested rails.

The government helped increase truck traffic by not limiting the production of large pneumatic tires, and the Railroad Administration actively supported less-than-car-load shipment by truck. Posters were placed in railroad freight offices suggesting that shippers use trucks for small shipments and for perishable items. Moreover, the Council of National Defense eliminated the costly empty backhaul by establishing bureaus to coordinate cargo shipments and provide return loads for truckers. The major tire manufacturers supported such actions by the government and benefited from the increased truck transportation by increased tire sales. Harvey S. Firestone came to the aid of highway and national transportation by a stroke of genius: a "Ship-by-Truck" advertisement campaign. Good roads and regularly scheduled runs increased truck traffic, reduced rail congestion, and sold more tires.<sup>15</sup>

The Firestone Company spent more than \$2,000,000 promoting its ship-by-truck campaign. The system of bureaus, that had been set up by the Council of National Defense to coordinate traffic and help locate return loads for truckers, was abandoned at war's end, but was re-established by the Firestone Company. The sixty-seven branches it set

up to provide information, conduct research, distribute literature about the trucking industry simultaneously provided return loads for back hauls. Each branch was to promote the construction of better roads and to lobby for uniform state laws concerning interstate traffic. Firestone sent a fleet of trucks throughout the South to promote trucking and to gain free advertising. Most of the publicity paid for by Firestone and appearing in local newspapers pointed out that trucks could reduce the cost of operating a business, thereby reducing the general cost of living for everyone. The railroads inadvertently aided trucking by going on general strike in 1920, just days before the beginning of a "national Ship-by-Truck Good Roads Week."<sup>16</sup>

The alliances announced during World War I between tire producers and the trucking industry continued to prosper into the 1930s and 1940s. Both industries were adversely affected by the postwar economic depression of 1921 and 1922, but, as politicians had promised, prosperity was just around the corner. Truck sales decreased from the record-setting 300,000 in 1920 to less than half that figure in 1921. However, the recovery was apparent when for the first time total sales reached 400,000 in 1923, and the tire industry ushered in the jazz age with the development of balloon tires.<sup>17</sup> The first cord pneumatics had reduced many of the problems encountered with solid rubber tires, but the high pressure required in these tires reduced tire wear, increased blowouts, and retained many of the engineering deficiencies of the solid tire. Moreover, the tires were narrow in width, requiring the diameter of tires to increase with the carrying capacity of the truck. As tires increased in size, the height of the axle increased, and it was impossible to build a loading platform of standard size to maximize loading efficiency.<sup>18</sup>



The balloon tire used the same basic air support system as cord pneumatics, but the same volume of air was displaced within a larger tire casing. The load rested on a cushion of air instead of a rigid tire. This new design resulted in the tire becoming a container for air instead of a load support system. Thus the new tire eliminated the extremely high air pressure per square inch in the tire and greatly decreased the possibility of blowouts and the high incidence of tread wear. The advantages were clear: the increased surface of the tire gave greater traction, and the lower air pressure allowed the tires to absorb most of the vibrations caused by small bumps in the road. Higher speeds could be maintained because of the general reduction in vibrations and road shocks.<sup>19</sup> Moreover, new processes for bonding rubber, cotton cord, and steel reinforcement into one unit and advances in mass production produced a superior and more economical tire. The average mile-cost for tires thereby was reduced from one cent per mile in 1918 to one-tenth of that cost in 1930.<sup>20</sup> With advances in tire manufacturing, good roads, veteran drivers trained during the war, and public acceptance thanks to a good press, truckers could look to the future with confidence. Aiding them in capturing a larger share of the market was continued technological advances.

FOOTNOTES

<sup>1</sup>Rollin W. Hutchinson, Jr., "Motor Trucks - The New Freighters," World's Work, XXIII, No. 3 (January, 1912), p. 270.

<sup>2</sup>David B. Harrison, "The Akron-Boston Express of 1917," Car Classics, Editions of the American Automobile Association, 1966, p. 11.

<sup>3</sup>Goodyear Tire News (September, 1917), p. 1.

<sup>4</sup>Harrison, "The Akron-Boston Express of 1917," pp. 11-14.

<sup>5</sup>Ibid.

<sup>6</sup>Ibid.

<sup>7</sup>Ibid.

<sup>8</sup>Ibid.

<sup>9</sup>Robert F. Karolevitz, This Was Trucking (Seattle: Superior Publishing Co., 1966), p. 62.

<sup>10</sup>Ibid., pp. 61-63.

<sup>11</sup>Edward Mott Woolley, "Motordom Mobilized," Colliers!, LX, No. 16 (December 29, 1917), p. 9.

<sup>12</sup>Walter Tips, "Vignette: September-1918, Texas Trucks in the Rainbow," Military History of Texas and the Southwest, Vol. XII, No. 1 pp. 8-13.

<sup>13</sup>Ibid.

<sup>14</sup>G. A. Kissell, "Motor Trucks on America's Bread Line," The Outlook, XXVI, No. 5 (July 3, 1918), pp. 394-395.

<sup>15</sup>Alfred Lief, The Firestone Story (New York: McGraw-Hill, 1951), pp. 99-119.

<sup>16</sup>Ibid., p. 120.

<sup>17</sup>Motor Vehicle Manufacturer's Association of the United States, Inc., Automobiles of America: Milestones, Pioneers, Roll Call, Highlights (Detroit: Wayne State University Press, 1974), p. 283.

<sup>18</sup> Board of Investigation and Research, Technological Trends in Transportation (Washington: U. S. Government Printing Office, 1945), p. 45.

<sup>19</sup> Lief, The Firestone Story, pp. 138-139.

<sup>20</sup> Technological Trends in Transportation, p. 45.

## CHAPTER V

### THE MECHANICAL REVOLUTION

Technological advances were not limited to tires, but these did help spur other improvements. With the new tires, trucks could maintain higher speeds for longer distances; naturally engineers sought greater operational efficiency to gain a competitive edge in the market place. Major truck manufacturing firms invested millions of dollars in research and development of more efficient engines and metallurgy. The new metals developed were stronger and lighter, which led to a great reduction in wear and weight. Powder metallurgy allowed many parts to be cast in close to finished form, eliminating much costly machine tooling. Many of the major parts of large trucks became standardized so that they were interchangeable and could be used as long as ten years.<sup>1</sup>

Between the two world wars, trucks became more efficient transports, and, at the same time, the average cost per truck was greatly reduced. Manufacturing advances and the economy of scale had a great impact on initial cost reductions. Before World War I truck production was fewer than 100,000 units per year but averaged more than 500,000 units per year between the wars. Production was not greatly affected during the Great Depression; in only two years sales dipped below 300,000 units, and a record 891,000 trucks were sold in 1937.<sup>2</sup> Total truck sales owed much to external conditions not affected by manufacturing improvements. The large network of improved roads enabled highway

transportation to develop where railroads had enjoyed a monopoly and in regions where other modes of transportation either were not available or else were archaic. Nevertheless, trucking would not have developed without greater durability and increased speed offered by the technologically improved truck.

During the two decades following World War I the price of trucks was reduced by half. The price for an engine with equal horsepower rating was reduced four-fifths, but could be expected to operate for three times as long as the earlier engine. Other major components found on a truck had similar reductions in cost. Increased gas mileage and horsepower came with the introduction of higher grade oils during the early 1930s. The lighter weight oil reduced engine wear and, at the same time, maintained its viscosity at higher temperatures and provided a greater ease in starting during cold weather. Steel alloys produced additional strength and life expectancy in axles, universal joints, and gear teeth. Refinements in carburetors, reduced wheel diameters, and replacement of the chain drive with a solid driveshaft gave trucks greater power utilization. The end result was a higher quality product that could transport goods at a cheaper per-ton-mile cost.<sup>3</sup>

Although gasoline engine design was not radically altered, truck engine development in the 1930s foretold the trend to come. The diesel truck engine was first introduced in 1931 by Cummins and promised to give better service with cheaper operational cost. However, the initial cost was much higher than a comparable gasoline engine, and repairing the engine required special tools and specialized mechanics. The diesel motor had fewer working parts and burned less fuel, and for those reasons became popular among the long-haul truckers.

Other advancements during the 1920s increased the load capacity of trucks. Multi-gearred transmissions and two speed axles enabled the trucks to maintain engine speed at a level of peak performance and transmit the power from the engine to the rear wheels without a substantial loss of power. Speed could be maintained on hills and, at the same time, decrease the strain on the engine. Moreover, advancements in trailer design and construction gave greater load capacity and greater utilization of the improvements in engines and transmissions. Trailers appeared about the same time that the truck was first introduced. The trailer at first was no different from the bed of a farm wagon. By 1920, a majority of truck-drawn trailers had lost the front axles and were attached to the truck by a hitch much like the earlier farm wagon.<sup>4</sup>

The inherent advantages, even with crudely constructed trailers and the pragmatic nature of the truck industry, soon led to the development of modern trailers. Small trucks could pull larger loads, and, once able to release the trailer, the truck became more flexible. A large straight-body truck had much less maneuverability than a tractor and trailer combination was less than the conventional truck and provided a more economical operation.

Again the greatest technological advancements in trailer construction came immediately following World War I. Before 1920, attaching and releasing a loaded trailer required several men, hydraulic jacks, and considerable time, but with the introduction of the automatic fifth wheel in 1920, the operation was accomplished with ease. A practical application of power-assisted air brakes to trailers appeared in 1924, enabling the driver to control jack-knifing and to stop in shorter

distances. Pneumatic tires and higher quality springs reduced road shock, and the weight of the trailers continued to decline with the replacement of heavy iron supports with lighter steel alloys. The heavy solid axle ended with the use of I-beam construction, giving added strength with lighter weight and allow its replacement with tubular axles. The 1930s brought more advancements, many of them borrowed from the aircraft industry. Aluminum and stainless steel replaced heavier metals, and trailer manufacturers used the principle employed in airplane fuselage building to produce frameless trailers. Before the end of the decade, standardization of trailer dimensions greatly reduced manufacturing cost.<sup>5</sup>

Improvements in truck design, durability, and manufacturing techniques were conceived with economy of operation in mind and not the creature comfort of the truck driver. However, many of the improvements did reduce the workload of the driver and provided greater eas of handling. The mechanical marvel of the road prior to 1920 not only required the driver to possess a great amount of mechanical knowledge, but also an abundance of physical strength and endurance. The typical truck cab resembled the typical dray wagon riding platform. Without the protection afforded by a cab, teamsters were at the mercy of the changing elements. Rain, snow, mud, and bugs found a resting place on the weary driver as he sat on the wooden bench and operated the tiller. For the first twenty years of trucking, few vehicles offered any protection for the driver--and then conditions became progressively worse. With higher speeds possible and an extended radius of operation economically feasible, the trucker faced longer hours, increased wind velocity, and country roads.<sup>6</sup>

With each rural trip the driver was fearful of a mechanical breakdown with little expectation of help. When extra parts, a well equipped tool box, and an extensive--and colorful--vocabulary did not fix the ailing mechanical beast, the driver was prepared to spend the night and resume work the next morning. Hammocks, blankets, and food provided some comforts to the trucker, but during inclement weather the trucker most often slept under his truck to avoid falling snow or rain. Before 1920 many farmers earned extra money by providing room and board to stranded motorists, including truckers.<sup>7</sup>

Operation of the vehicle was a physically punishing ordeal. Solid tires transmitted each rough spot in the road up the steering column with such intensity that most drivers' hands and arms became numb after a few hours of driving. Constant effort was required to keep the truck headed on a straight course, and negotiating a sharp turn or attempting to park a truck required a great amount of physical strength. The vertical-position steering wheel was awkward and produced many aching back muscles. Improvements in steering geometry, and changing gear ratios gave greater ease in steering, and the stability of the front end reducing the road shocks transmitted up the steering column.<sup>8</sup>

Driving comfort continued to increase as attention was given to reducing the damage to freight due to vibrations and to increased load-carrying ability. Balloon tires eased much of the road pounding, but higher quality steel, used to increase the length of leaf springs, made an equal contribution to riding comfort. Longer springs led to the development of the helper spring that adjusted according to the weight of the load. Leaf springs were constructed so as to have different strengths. The weaker springs provided a soft ride with reduced load,



and the stronger springs would automatically come into use when the truck was carrying a heavy load. To extend the life of leaf springs and to smooth the ride even further, shock absorbers were introduced to limit the amount of road shock on the leaf springs. The driver profited --the "bone crusher" had evolved to the "bone rattler."<sup>9</sup> The early motor wagon, as the term implied, was a wagon where horsepower had been replaced with motorpower.

The oldtime teamster had definitely been a member of the working class, but independent, tough minded, and spirited, and he took pride in his ability to deliver freight with little regard for weather conditions. When the bullwacker became a truck driver, these same attitudes prevailed. Gradually the demand for truckers outstripped the supply of rugged teamsters, however, and new drivers had to be recruited. Also, as roads were surfaced, weather conditions did not affect the operational efficiency of the truck but did take its toll on the driver. At first windshields became standard equipment, not so much to protect the driver from the elements as to stop blurred vision created by the greater velocity of the wind striking the driver's face. Next came a roof that was an inexpensive extension of the truck body and offered some protection. The driver then added canvas side curtains attached to the roof that could be rolled down to offer even further protection from the elements but limited a driver's visibility.

During the 1920s manufacturers gradually adopted enclosed cabs. Thus by the end of the decade, most production-model trucks offered some protection for the driver. Until World War II, cabs improved in quality and increased in size. The standards set by the automobile both in design and comfort appeared for the first time during the 1930s.

Adjustable, padded seats, sun visors, and heaters became standard equipment. Most drivers were happy when in 1920 windshield wipers were adapted to the truck, and they were overjoyed when in the 1930s the wipers changed from hand operated to vacuum or electric powered. Long-haul truckers were grateful for the attention given to general comfort and roadability of the new breed of trucks.<sup>10</sup>

Moreover, advancements in smoothing out the ride made the sleeper cab practicable for the first time. Many different systems had been tried to provide the trucker with a home away from home. Some sleepers were located under the bed of the truck for the extra driver, but had proven impractical. Not only was it impossible for the driver in the sleeper to contact his co-worker, but also the road grime propelled by the truck's tires penetrated the sleeper. In case of accident there was a greater chance of the rider being seriously injured. One other unique system was tried; sleepers were placed on the side of the trailer. However, this system had the same drawbacks as the under-the-bed-sleeper and was soon discarded. By the late 1930s sleeper cabs for the interstate driver had developed so that a road-weary driver could find some sleeping comfort. The unit was most often attached to the rear of the cab and offered a seventy-inch-long, thirty-inch-wide berth. The most popular sleeper was accessible from the cab which allowed communication with the driver while enroute, or, in the case of a lone operator, greater accessibility and avoidance of leaving the cab and braving the weather to climb into the sleeper.

Technological improvements eliminated many of the miseries of the road and greatly reduced the accident rate. Not only was the physically abused driver tired from long hours at the wheel, making him inattentive

and careless, but also he suffered many accidents not by his error but from faulty design. Improved steering gave him greater control of his vehicle, balloon tires gave him better traction, and windshields gave him improved visibility; but the truck engineers' crowning achievement was an improved braking system. Using the early-day trucking vernacular, truck brakes were of "P and P" design: "push like hell and pray you stop." The first trucks used the same braking system as automobiles. Various methods were tried until, at the turn of the century, external contracting brake shoes replaced most of the braking mechanisms that locked the transmission and forced the vehicle to skid to rest.<sup>11</sup>

The external contracting brake used virtually the same principle as the modern system. Brake linings would contact a smooth drum that was attached to the wheel, and the friction would, in theory, stop the vehicle. An efficient braking system was slow to evolve. At first linings proved to be the major problem. Cotton and silk fabrics were tried, but failed to withstand the demands placed upon them. Leather linings became slick with continued use and, when wet, provided little friction. In 1907 woven camel hair linings were introduced; their resistance to wear and their ability to provide adequate friction under various conditions led to the development of a woven asbestos lining.<sup>12</sup>

At first, attention was given to the brake lining. Then, when a satisfactory lining was produced, engineers began redesigning the basic external contracting system. Several design features limited braking power, for these brakes were exposed to water, grease, oil, and dirt that rendered their lining useless until dried or cleaned. The internal expanding system, forerunner of the modern brake, was perfected in the early 1920s. First the drum and lining were enclosed to limit foreign

matter from reducing the effectiveness of the brake lining. Second, this internal system allowed for the development of servo-mechanical devices that reduced the amount of force required by the driver to stop the truck. Until 1928 improvements on the internal brake came in the form of increasing the width and thickness of the brake shoe to give increasing contact with the drum and increased longevity of the shoe.<sup>13</sup>

Mechanical brakes were restricted on heavy trucks because of the tremendous amount of force required by the driver to push the pedal. Therefore most heavy trucks had brakes only on the rear of the truck. However, with the perfection of a four-wheel braking system came the introduction of hydraulic pressure systems. This new principle allowed brake pressure to be equally applied to all four wheels at the same time, thereby increasing braking power and reducing skids. The next five years proved instrumental in refining the braking system. Moulded linings replaced woven, vacuum boosters; air-assisted brakes allowed for greater force to be applied; and the development of cast alloy brake drums helped relieve brake fading caused by expanding drums. Brake shoes and drums increased in surface area, and power brakes changed from merely helping to relieve the amount of foot pressure to applying increased pressure on the drum. The metamorphosis that took place not only helped reduce accidents and allowed the truck to travel at higher speeds with less risk, but also reduced brake maintenance. For the twenty-year period following World War I, the life expectancy of brake shoes rose from an average of 7,500 miles to 45,000 miles.<sup>14</sup>

One of the technological improvements that aided the over-the-road trucker more than it did his urban counterpart was advancements in lighting. At first trucks had been equipped with the illumination used

on horse-drawn wagons: kerosene lamps. These dull, glowing lanterns provided sufficient light for the teamster to travel four or five miles an hour without leaving the road. More important, such a lantern, hung from the rear of early trucks, helped avoid rear end collisions. In 1900, the R. E. Dietz Company of New York City, started producing a twenty-candle power, kerosene lamp that would project a beam of light up to 200 feet and promised to keep a steady flame while a vehicle traveled over rough roads.<sup>15</sup> The Prest-O-Lite Company, formed four years later, perfected headlights that used pressurized acetylene gas and increased the intensity of the beam.<sup>16</sup>

However, progress rapidly replaced the old with the new. The electric headlight made its first appearance about 1912.<sup>17</sup> By 1920 most trucks were equipped with electric lights, and by the end of the decade double filament bulbs were in use. The manual hand-dimmer soon was moved to the floor of the truck, and illumination was provided for instruments on the dash. In quick succession, tail lights, side lights, and stop lights were added. During the 1930s long-haul truckers had little difficulty negotiating highways at night, and, with the addition of fog lights and high intensity bulbs in the mid-1930s, the hazards of trucking after dark were greatly reduced.

Advancements in truck design had several advantages over those made on automobiles. Whereas the car was given a new body design each year with minor mechanical improvements, truck manufacturers did not radically alter the basic structure of the truck body, but replaced outdated mechanical equipment on new models. The upshot was that owners of older model trucks could purchase the improved equipment, install it in their truck, and gain the advantage of technologically superior service

without buying a new truck. Moreover, trucks gave better service than cars, thus increasing their longevity. The increased mileage delivered by trucks became the basic selling point used by truck manufacturers: lower cost per ton-mile. Automobiles became outdated after several years of service because of the introduction of new body design with more chrome, longer fins, or bigger grills. Trucks were traded in or discarded when the cost to maintain the vehicle in good condition reduced the profits to be made with them; the purchase of a new model would bring greater economic rewards for the owner.<sup>18</sup>

Specifization within the trucking industry also led to technological improvements that otherwise would have developed more slowly. Heavy trucks were custom-made to fit hauling conditions. Drump trucks operating off the road hauling tons of iron ore required different engines, axles, and transmissions than those on over-the-road trucks. Companies began to specialize in the building of one type of truck. Coal carriers, snow plows, light delivery vans, and high speed tractors all needed special equipment; major manufacturers that tried to make a standard truck to fit each job could not compete with specialty firms. Several companies were able to maintain a low-volume, high-profit business by capturing one aspect of the market.<sup>19</sup>

The system of specialization not only applied to truck manufacturers, but also to producers of truck parts and accessories. Most truck builders at the turn of the century built their entire product out of parts they had designed and constructed from raw materials. However, when as many as 500 truck companies failed to sell enough trucks to stay in business, many turned to manufacturing parts for other companies. Several of the larger components of heavy trucks cost more

than a cheap automobile to produce; axles, engines, and transmissions, because of their increased complexity and costly development, ultimately were produced by but a few speciality firms.<sup>20</sup> Many truck manufacturers became body builders, purchasing engines, axles, transmissions, bearings, pistons, rings, and other mechanical parts from various parts' suppliers. Ultimately the three largest automobile manufacturers --Ford, General Motors, and Dodge--dominated the light truck and standard tractor market. However, Diamond Reo, International Harvester, Mack, White, Kenworth, and Peterbuilt continued to provide speciality, heavy-duty trucks.<sup>21</sup>

FOOTNOTES

- <sup>1</sup> Board of Investigation and Research, Technological Trends in Transportation (Washington: U. S. Government Printing Office, 1945), p. 48.
- <sup>2</sup> Motor Vehicle Manufacturer's Association of the United States, Inc., Automobiles of America: Milestones, Pioneers, Roll Call, Highlights (Detroit: Wayne State University Press, 1974), p. 283.
- <sup>3</sup> Technological Trends in Transportation, pp. 48-51.
- <sup>4</sup> Ibid.
- <sup>5</sup> Ibid.
- <sup>6</sup> P. J. Russell, The Motor Wagons (Akron: The Pioneer Motor Traffic Club of Akron, 1971), pp. 62-67.
- <sup>7</sup> Ibid., p. 67.
- <sup>8</sup> Athel F. Denham, 20 Years' Progress in Commercial Motor Vehicles (Washington: Automobile Council for War Production, 1942), p. 164.
- <sup>9</sup> Ibid., pp. 171-172.
- <sup>10</sup> Ibid., pp. 169-173.
- <sup>11</sup> Denham, 20 Years' Progress in Commercial Motor Vehicles, pp. 178-179.
- <sup>12</sup> Automobiles of America, pp. 40-41.
- <sup>13</sup> Denham, 20 Years' Progress in Commercial Motor Vehicles, p. 128.
- <sup>14</sup> Ibid., p. 97.
- <sup>15</sup> Automobiles of America, p. 23.
- <sup>16</sup> Ibid., p. 33.
- <sup>17</sup> Commercial Car Journal, 50th Anniversary Special, The Golden Years of Highway Transportation (Philadelphia: Chiton Publication, 1961), p. 88.



<sup>18</sup>Technological Trends in Transportation, p. 60.

<sup>19</sup>Ibid., p. 59.

<sup>20</sup>Ibid., p. 58.

<sup>21</sup>Motor Truck Facts, 1973 (New York: Motor Vehicle Manufacturers Association of the United States, 1974), p. 15.

## CHAPTER VI

### THE TRUCKING MYTH

The romantic myths which Americans attached to the development of the United States often were a part of the transportation system that allowed a young growing nation to expand to its natural boundaries. The great migration westward, be it by wagontrain, steamboat, or railroad, produced visions of heroic wagon masters, ship captains, and railway engineering traversing unknown lands to settle a few brave pioneers in an untamed wilderness. As communities grew along the routes of transport, creaking freight wagons and the crack of the bullwackers whip, churning paddle wheelers with the shrill sound of whistles, and the metallic clacking of iron horses with their hiss of escaping steam, announced that communication with the outside world had been reestablished.

The arrival of these cargo carriers in isolated communities often was the most exciting event of the week, month, or even year. News of world and national events could be learned, scarce merchandise could be purchased, and exciting tales of exotic places could be heard. As transportation improved, farm commodities could be shipped back East, but few could afford the fare for a personal glimpse of the wonders of the city. This one-way communication lasted until the arrival of the horseless carriage. Not only could the urban dweller escape the crowded city for pleasure rides into the country, but also the farmer could use the same avenue to see the city lights. It was no small surprise that

a country whose national heritage rested solidly on individual mobility would adopt a modern symbol of the machine age. Early in the twentieth century, America started a love affair with the automobile.

Few objects in the history of mankind have captured the attention, worship, and status that Americans have given their automobiles. A nation that held individual freedom sacred above all else had obtained one of its most prized possessions: freedom of travel. At first the rich enjoyed the touring car for pleasure and prestige; then as production increased the middle-class urban dweller could afford a used car or Ford Tin Lizzie, and by the 1920s the rural person imbued with the same spirit of freedom could trade his horse for an automobile. As the pleasure car brought the city dweller in contact with the niceties of the countryside and allowed farmers to take advantage of the culturally stimulating city, so also truckers took advantage of the new mode of travel and offered transportation services to both areas.<sup>1</sup> The trucker did not stop with pavement's end, but extended his routes over impossible roads. Once again the romantic imagination crowed a hero.

As the unruffled sail, the feel of the soft gentle breeze, and the smell of salt spray had stirred the habitual sailor centuries before, so the call of the open road kept the trucker behind the wheel. Before the advent of a modern highway system these pioneers of the trucking industry conquered the wilderness--fighting elements, roads, and machines. At each sleepy hamlet, small boys would be awestruck by the sight of large, coughing, belching, smoking trucks. While their fathers asked questions about the mechanics of the vehicle or would circle the truck and kick the tires, the boys would look at the leather-jacketed trucker and dream of the day when they could command such an awesome

mechanical marvel. The free-lance trucker was as independent as his forefathers who followed Indian and game trails West, crisscrossing the nation and displaying their independent nature to all.

The farm boy soon realized his dream. The two major wars brought with them a great demand for both civilian and Army truck drivers. Motor Corps personnel first were truckers and second were soldiers. Conditions that existed in wartime trucking were similar to those of the pioneer trucker; in both cases drivers resisted social and organizational restraints. At war's end, many young veterans of the Motor Corps returned home to utilize their recently learn occupation. Moreover, many men not previously connected with transportation, chaffing from the rigid structure of Army life, longed for independence. Orders, rules, and regulations robbed them of their personal freedom, while the life of the trucker seemed to offer opportunity for a young, hard working entrepreneur willing to live on the road.<sup>2</sup>

The myths that developed from the early days of trucking had their roots in the efforts of the independent trucker in the post-World War II period. Truckers not only were considered independent by the public, but also unreliable. Not until the development of the more sophisticated semi-trailer rigs did drivers have to develop skills beyond those of a man capable of driving an automobile. Moreover, as the American public became more consumer oriented during the Jazz Ages of the twenties, truckers were required to haul heavier loads at faster speeds. Truck engine size increased, trailers became longer, and skill in handling a sixty-foot combination truck-and-trailer became more important.

With new equipment, long stretches of concrete roadways, and the growing strength of the Teamsters Union, working conditions for most

truckers improved dramatically. The exception was those endured by over-the-road truckers. The urban teamster was not unlike other blue collar workers, arriving at work at sunrise and going home at sunset, repeating the same procedure five or six days a week. Most often the urban driver received an hourly wage; only on rare occasions was he required to stay away from home overnight. The intercity trucker, most often was paid by the mile, and it was not uncommon for the long-hauler to stay on the road for weeks. The public response to these two different job positions varied to a large degree, just as did the attitudes of the drivers involved. The local hauler or hourly paid driver worked to live, but many of the over-the-road hauler lived to work.

The stock market crash and the ensuing depression of the 1930s helped the trucker gain social acceptance. Many inefficient transportation companies and unskilled truckers were bankrupted or became unemployed.<sup>3</sup> The keen competition for freight resulted in even higher speeds and heavier loads.<sup>4</sup> Owner-operators had the choice of cutting rates and increasing service or else of remaining idle and going out of business. Every possible expense was cut and then cut again. The owner-operator lived in his truck and would haul anything anywhere at any time of night or day; he based his rates not to make a profit but to make payments on his truck. Small businesses utilized highway transportation more than ever. With low rates, an abundance of willing truckers, and speedy delivery, warehouse and shelf stock could be held to a minimum, thus greatly reducing overhead costs for the businessman.

Low transportation rates required truckers to work longer hours and drive more miles to remain solvent. Competition from major freighting firms, which paid extremely low wages and charged corresponding low

rates, left truckers at the mercy of the shipper. A trucker working for an interstate firm could expect wages from five cents to a dollar an hour. The average wage earned in 1933 by interstate drivers employed by common and private carriers was twenty-four dollars for an average work week of fifty hours. However, these figures were reported by the firms, which may not reflect the true earnings of employees. Also included in this survey were the wages of part-time drivers, which reduced the average amount of hours that the drivers were working each week; many drivers did not work on a regular basis, but each morning appeared ready for work at the loading docks. If work was available they would drive; if not they would try another shipping firm.<sup>5</sup>

Private and common carriers required fewer hours per week of their drivers than contract or owner-operator carriers. A government survey conducted in 1933 reported that fifty-one percent of contract carriers required their drivers to drive for more than ten continuous hours, but only forty-one percent of the private carriage firms reported a like amount. Moreover, the statistics for both carriers reflected the strenuous workload required of drivers. More than fifteen percent of the contract carriers reported that drivers normally were required to drive sixteen hours or more each day, while private carriers reported that only seven percent of their drivers were working similar hours.<sup>6</sup>

The data gathered from other than trucking firms concerning hours and wages showed a significant difference. The Association of American Railroads issued a different set of figures. Its interest was more than humanitarian; the working conditions of drivers was an important part of the railroad argument favoring federal regulation of highway transportation. The information the railroad association reported was

was from data it had gathered from reports made by the Delaware State Police and the Kansas Port of Entry Authority, and by observers stationed at checkpoints in the same state agencies. The association reported that the average driver earned two dollars less than the twenty-four dollars per week reported by trucking firms, and wider discrepancies could be found in the remaining information. The railroad association report revealed that drivers worked an average of ninety-nine hours each week for an average of 22.3 cents per hour.<sup>7</sup> The Federal Coordinator of Transportation justified the differences in the reports of the Association of Railroads and the coordinator's staff as a result of the backgrounds of the drivers involved. The coordinator's report was compiled from urban trucking firms employing drivers from urban areas. The railroad association had gathered its data from a group of drivers hired from rural areas. "Farm boys and young men from country villages," it said, were driven to accept any form of employment under any condition rather than remain idle. The conclusion was that the data reported by the government was correct; the American Association of Railroads had been misled by the work ethic.<sup>8</sup>

A third set of data was garnered in the winter of 1933-1934 by various state highway patrols to provide a corresponding set of statistics for owner-operators engaged in intercity freighting. The most interesting comparison was that thirty-five percent of the drivers were expecting to be on the road for more than sixteen hours; in that group, twenty-two percent estimated the duration of the trip to be more than twenty-four hours. More than one-fourth of the drivers on trips of forty-eight-hour duration had worked prior to starting the trip, but only six percent of the drivers expected no subsequent rest. However,

information gathered did not compare the amount of time a driver was behind the wheel of the vehicle to the length of time waiting to unload or to load his truck.<sup>9</sup>

The longest hours and the most physically punishing aspect of trucking during the depression existed among that group of truckers required to endure overnight layovers. The Transportation Coordinator's survey of 1935 showed that fifty percent of the companies sampled in this survey provided part of or all the expenses for lodging and food for each of its drivers when they were forced to remain en route for more than one working day. A small percentage of the companies provided sleeper cabs or instructed the driver to sleep in the truck seat. Most companies that paid for overnight expenses reserved quarters in tourist camps, hotels, or rooming houses; in some cases drivers were reimbursed for the cost of a room. Some firms solved the problem by establishing company dormitories. However, in at least one case the dormitory was a bunk in a warehouse. The investigation by the National Code Authority in 1934 produced approximately the same set of facts. Sixty-seven percent of the companies surveyed provided some type of sleeping accommodations; more than sixty percent were at hotels, tourist camps and company dormitories. The remaining companies had sixteen percent of the drivers in sleeper cabs, ten percent in cab seats, and seven percent at gas stations. The drivers with sleeper cabs not only rested en route but also worked an average of twenty hours more per week while earning the same weekly salary.<sup>10</sup>

These surveys of trucking firms by the Federal Coordinator of Transportation did not reflect the hardships faced by many drivers. The transportation companies perhaps responded to the questionnaires



with hope of avoiding federal intervention in the trucking industry. Moreover, the coordinator believed that the companies surveyed were not representative of all the different phases of the trucking industry, and that the surveys failed to give an accurate reflection of working conditions.

In the coordinator's report an addendum was added "...to convey a full understanding of the rigorous exactions which are imposed on some drivers by their employers, and on others by what they conceive to be economic necessity." Such conditions were exposed to be economic necessity." Such conditions were exposed by personal interviews conducted by the coordinator's field staff and extractions from testimony before the Michigan Public Utilities Commission. The drivers involved in transporting interstate cargo, according to the addendum, worked unusually long hours of continuous service for extremely low pay. Consecutive road service in excess of sixty hours was not uncommon, and in many cases the drivers were given the choice of eating or sleeping. The employees' lack of sleep caused many to doze at the wheel. Lucky drivers hallucinated when sleep fatigue set in and would pull to the side of the road and take a short nap. Others were involved in accidents that resulted in great amounts of property damage and in a few cases loss of life. One embarrassed and extremely fatigued driver fell asleep at the wheel and rammed through the front of a police station. When the officers pulled him from the cab and took him into the station, the driver was so exhausted he could not sit in a chair.

The monetary return for such long hours and miserable conditions was meager. One driver reported he worked for eighty hours, with three hours rest, for twelve dollars. Other owner-operators worked to pay for

gasoline, meals, and payments on the truck. One owner-operator could not afford to pay his helper, but the man wanted to stay employed and worked for the price of his meals. Some men became victims of the depression and cutthroat competition in transportation; others were led into the business by unscrupulous truck salesmen. Transportation brokers, for a percentage of the freight rate, would locate loads for truckers to eliminate deadheading, and as a side business would sell trucks. Brokers promised truckers a business opportunity that could not fail. With a small down payment the trucker became an entrepreneur with monthly payments. After several months of hard work and with little return on his investment, the trucker could not make his payments. The broker then would repossess the truck and sell it to the next unsuspecting teamster.

With the passage of the National Industrial Recovery Act in 1933, working conditions and pay improved for many interstate drivers employed by trucking firms. A code of fair competition aimed at reducing work hours and increasing pay was instituted in 1934 for the trucking industry. Drivers were allowed to work to a maximum of one hundred and eight hours in any two-week period, with overtime pay at one and one-third their normal salary for all hours worked more than forty-eight hours in one week. Moreover drivers were to be given two days off each week. Minimum wages were set according to geographical areas. The hourly scale of thirty to fifty cents was consistent with the reported average wage of all truck drivers as released by the National Transportation Coordinators' office.

FOOTNOTES

<sup>1</sup> Department of Commerce, Bureau of Public Roads, Impact of Improved Highways on the Economy of the United States (Washington: U. S. Government Printing Office, 1958), pp. 178-181.

<sup>2</sup> Interview with Robert J. Brassfield, Veterans' Administration Employment Service, Wichita, Kansas, August 27, 1975.

<sup>3</sup> Robert Leiter, The Teamsters' Union: A Study of its Impact (New York: Bookman Associates, Inc., 1957), p. 138.

<sup>4</sup> John Montville, "Wheels for Commerce, A History of American Motor Trucks," The American Car Since 1775 (New York: The Automobile Quarterly, 1965), p. 400.

<sup>5</sup> Federal Coordinator of Transportation, Hours, Wages, and Working Conditions in the Intercity Motor Transportation Industries (Washington: U. S. Government Printing Office, 1936), p. 57.

<sup>6</sup> Ibid., p. 69.

<sup>7</sup> Ibid., p. 119.

<sup>8</sup> Ibid., p. 99.

<sup>9</sup> Ibid., pp. 86-87.

<sup>10</sup> Ibid., pp. 91-93.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid., p. 99.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid., p. 116.

<sup>15</sup> Ibid., p. 117.

<sup>16</sup> Leiter, The Teamsters' Union, pp. 140-141.

## CHAPTER VII

### THE MODERN INDEPENDENT TRUCKER

By the middle of the depression interstate trucking had become big business, and by the end of World War II the long-haul trucker had established most of those qualities and characteristics that set him apart from other travelers on the national highways. At first glance, the man sitting at a highway cafe humped over a cup of coffee, enshrouded in cigarette smoke, was more than likely the driver of the large diesel truck parked outside. His unpressed clothes, uncombed hair, and perhaps the tattoo on his forearm set him apart from the normal tourist; even the most unobserving traveler could tell he was a trucker. The image of the trucker remained fairly constant from the late 1930s through the decade of the fifties. On the socio-economic scale among blue collar workers, the trucker remained near the bottom.<sup>1</sup>

Over-the-road truckers defied almost everything from Interstate Commerce regulations and speed limits to maximum weight laws. Holding true to form, the truckers' independent nature avoided stereotyping. However, some generalities about the long-haul trucker, a few based on myth, others on observations, can be made. Most often each trucker operated within a rigid social framework based on his relationship with the commodities he carried and the system in which he received his pay. At the top of the social scale was the owner-operator with the most expensive and most powerful rig, receiving payment on cargo based on miles

traveled. At the bottom of the scale was the regional hauler of agricultural products, operating an outdated company truck and drawing an hourly rate. The topics of conversation among truckers centered around the machine; destination was of secondary importance except during the winter months when road conditions were discussed.

The trucker, seemingly unaffected by the vast cultural differences encountered on his travels, possessed traits most often associated with the South or Midwest. His attitudes, dress, and speech patterns were a mixture of the two regions and may be attributed to the large percentage of truckers with rural backgrounds and their interest in country and western music. Truckers from the Northeast or Northwest who engaged in the long-haul soon lost their regional, cultural traits and came to resemble their counterparts who hailed from Oklahoma or Mississippi. This rich mixture of Southern and Midwestern culture, often associated with the cowboy of the nineteenth century, compelled writers to compare the modern trucker with the cowhand.<sup>2</sup> The myths, symbols, and legends attached to both occupations clouded cultural definitions and objective comparisons. Nevertheless, both cowboy and trucker reflected the ceaseless wanderings of a highly mobile society. The daily drudgery of both occupations was lost amidst descriptions of the adventures encountered on journeys up the dusty Chisholm Trail or its modern day, concrete equivalent, Interstate 35.

Heroes, myths, and symbols were representative of traits the general population held in high esteem or allowed the public to live their most treasured fantasies vicariously. The outstanding characteristics of both the cowboy and the trucker were independence, mobility, power, courage, and masculinity. The myth dictated that members of both

occupations enjoyed complete freedom, and that when conditions of employment were unbearable they would ride into the sunset. Thus the trucker and cowboy had an independence not enjoyed but sought by most members of the American society. Mobility, the great American pastime, reflected the national feeling that moving to a different region would bring happiness and prosperity and was the foundation for a romantic attachment to the transporters of goods. The Appaloosa stallion and the six gun were symbols of power for the cowboy; in more recent times, a diesel-powered Kenworth was the trucker's steed, and command of a 60,000-pound cargo wrapped in chrome and steel was the trucker's power. Courage was necessary to control such awesome power--to turn a stampeding herd, or to ride to the bottom of a mountain road when the brakes failed. Masculinity was the principal ingredient that unified all of these heroic traits. Therefore women connected to both occupations played the role of an ever-waiting spouse or girl-friend, or as employees at their cultural centers: the saloon at the end of the trail and the pro-am truckstop beside the interstate highway.

The mystique that surrounded the trucker, unlike that of the cowboy, was not utilized to any large degree by the popular media as a central theme for novels, movies, or television. Humphrey Bogart's portrayal of a trucker in the movie, "They Drive by Night," did not produce a new genre, but instead a few "B" grade movies. The only modern movie that centered around trucking was a made-for-television film, "Duel," starring Dennis Weaver (who usually was associated with cowboy roles). Again the movie did not reflect the trucking culture. The truck symbolized the power of a machine and the helplessness of an individual caught in the wake of a mindless bulk of nuts and bolts.

The driver of the truck, hidden behind the dusty and tinted glass of the cab, was never shown to the audience as he carried out a vendetta against a man in an automobile.

Television has contributed to the development of a modern image of the trucker by news coverage of the Teamsters' Union and the Independent Truckers' strikes, and with a few attempts at investigative reporting. Jane Stern's look at the independent trucker in her book, Trucker: A Portrait of the Last American Cowboy, spurred national interest in trucking. The television news program "Sixty Minutes" produced a segment on one of its weekly programs devoted to the life of the trucker. However, time limitations, selection of the individual, and insufficient studies on the subject from which to draw information, resulted in a glossing over of only a few of the cultural elements of trucking. The follow-up of the "Sixty Minutes" segment on the "Tomorrow Show" gave more indepth coverage, but again fell short of producing a documentary on truckers. Tom Snyder, the host of the show, sought the unusual and sensational, but at the same time he appeared ill-informed on many aspects of trucking. The weekly television series, "Moving On," does not closely resemble the life of an owner-operator, but the truck gives the producers of the show a mobile medium through which unique situations can be presented.

Popular magazines, such as Reader's Digest, Saturday Evening Post, and Esquire, have published articles on trucking, but most often these have merely touched the surface; a journalist reports his experiences while riding with one trucker on one long-haul. Books of the subject are limited in scope and number. Motor Wagons, a work compiled by the Pioneer Motor Club of America, does not analyze the role of the trucker,

but does provide some interesting anecdotes from the 1930s. The only attempt to date to analyze the trucker as a micro-culture is Stern's Trucker: A Portrait of the Last American Cowboy. The author presented many interesting and unusual stories about truckers, but received poor reviews from truckers' magazines for dwelling on women truckers and the promiscuous sexual activities of drivers. However, at the date of its publication, Stern's work not only was the first book that approached the subject from the point of view of popular culture, but also was a very readable and informative work on an almost unexplored subject.

Truckers are not without a voice in the popular media. The single largest factor in popularizing trucking culture came with the adoption of the citizen band (CB) radio in trucks and automobiles. CBs were not new to the trucking industry, but did not have a wide appeal among truckers until the independent trucker strike of 1973. After national coverage of the strikers' use of the radio, the demand for CBs became insatiable. Not only did the general population want to listen in on truckers' conversations, but also to take part in exchanging information about road conditions and the whereabouts of state police. The fadism that surrounded the CB radio in the mid-1970s produced another important statement about the trucking culture, this time from country and western music. When C. W. McCall's "Convoy" topped the record charts, many country music fans purchased a CB. The central theme of the song centered around a group of truckers who were able to avoid speeding tickets by the use of radio communication. The first truck, called the front door, could report any police radar units or highway patrol cars, and the last truck in the convoy, or back door, was responsible for the same, making trucks in the middle immune to detection.



The second most important record of this genre was "White Knight." In it a highway patrolman with a CB lured a trucker into speeding by impersonating a trucker protecting the back door.<sup>3</sup>

By 1975 the trucker had become a national hero: an independent spirit, symbolizing mobility, power, and anti-establishment values, with a slight tinge of illegal activities to add the needed spice to create an American hero. The trucker had become the most popular modern folk hero. As with legendary figures of the past, the trucker's image was made more of myth than of fact.

The popular conception of a trucker as a large, slow-moving, dull-witted, muscular, tattooed man with greasy clothes and unshined army boots would no doubt describe a small minority of modern truckers. However, data collected by administering physical and psychological tests to truckers produced a different image. Truckers, as a group, conformed to the average height and weight of the American population in general--and tested above average in intelligence. Over-the-road drivers did score below average on artistic appreciation and musical aptitude.<sup>4</sup> One obvious reason for the popular belief that truckers were of less than average intelligence was their anti-social behavior toward people outside their profession. Furthermore, truckers spent most of their day on the road alone at the wheel; when social intercourse became available, variety and intellectual stimulation often was lacking in their conversation. The lonely hours behind the wheel traveling unbroken interstates left the trucker a man of few words. Moreover, only in the last few years has the noise level in some trucks been reduced to the point where conversations or radios could be heard above engine noise.

Even with the AM-FM stereo tape deck belting out "Johnny Cash and all that trash,"<sup>5</sup> or constant chatter on the CB, long-haul drivers had to resort to mental games to keep their minds occupied. A favorite pastime among truckers was daydreaming: recalling old experiences and visualizing future plans. During the long hours on the road with the roar of the engine as sole companion, the trucker became an expert at conjuring up mental images. Past experiences, both pleasant and unpleasant, were relived, and the emotions attached to their memory was re-enacted. One old trucker, admitted to being a "qualified expert on daydreaming"<sup>6</sup> after trucking for more than thirty years. He acquired the habit of remembering dates, names, and encounters on the road. When driving at night, he would relive all the important memories of his past. The hour of the day, day of the week, day of the month, and year of each important event in his life rolled from the tip of his tongue, his eyes twinkled with each pleasant adventure, and he became angry with each account of the tickets he had received.<sup>7</sup>

Daydreaming on the road is limited only by the ability of the trucker's creativity and covers a wide spectrum of subjects. A majority of truckers over fifty reflect on past glories or look toward retirement. The thirty-five-to-fifty year old group are prone to plan vacation time, work around the house, or activities with their families. In one such case a driver committed house plans to memory and was contemplating building his third house. Younger drivers think of future good times at a special truck stop, visiting girlfriends or wives, or how they will finance the expensive truck of their dreams. Tapedecks and radios have eliminated some daydreaming among truckers, but new electronic gadgets become boring on long trips and truckers shut out the

static and ever-present country music with a flip of a switch to engage in the age-old art of daydreaming.

Closely associated with the mental activity of daydreaming is the condition of hypnagogic hallucination. The phenomenon occurs during the stage between sleep and wakefulness. Among truckers this condition is brought about from operational fatigue, compounded by insufficient sleep, and the mesmerizing effect of traveling a long stretch of uninterrupted road. In a majority of cases, drivers report that the hypnagogic phenomenon occurs while they are driving on a long-distance run during darkness and are "fighting to stay awake."<sup>8</sup> The hallucinated object appears suddenly on the roadway, and the driver has to make an emergency stop to avoid hitting the object. The driver does not realize that the hallucination was unreal until the vehicle has stopped; even then some drivers refused to believe that the object did not exist.<sup>9</sup> One driver reported chasing a white horse across the state of Oklahoma.

The hypnagogic phenomena are often related to conditions that the driver has encountered during the day. One driver carrying a load of hogs to the stockyards, a task he thought unpleasant, was driving a long seldom-traveled section of flat roadway when a giant, pink hog appeared in the road. After skidding to a halt to avoid hitting the animal, the driver awoke to find the road empty except for black smoke rolling from his tires.<sup>10</sup> Cattle and deer crossing signs often trigger hallucinated animals. One driver reported seeing logs laid across the road the night after some teamsters threatened to halt all independent trucking by felling trees across the highways. Most truckers who push their bodies beyond their physical limits experience

the phenomena, and a few have accidents as a result of emergency stops. When all of the brakes are locked to avoid hitting the hallucinated object, the trailer skids out of control and the rig turns over.<sup>11</sup>

Lying somewhere between daydreams and hallucinations is yet another condition that effects most truckers: memory deception. Drivers on the long-haul are social recluses and, when alone, daydream about the most exciting event that happened to them or that they wished would happen to them. After the daydream has been repeated for thousands of times, it becomes increasingly hard for the trucker to distinguish between daydream and reality. Many times exciting stories circulate at truckstops, and truckers are happy to repeat the entertaining yarn as a personal experience. Evading speed traps, making record breaking trips from coast to coast, or (the old standby) picking up a young attractive female hitchhiker clad only in a raincoat, have become favorite stories of truckers. These men admit that other truckers tell the same adventure year after year, but each time the event becomes more exciting--and each time the trucker will swear it is the truth.

The physical and mental demands placed on drivers to meet financial obligations and job requirements often are beyond human capabilities. Moreover, some drivers use what little vacation time or days off they might receive to "live it up." Drivers spend their free time seeking the pleasures of life not afforded the trucker on the road; often they return to duty more exhausted than when they left. The end result is that some form of stimulus is consumed by the majority of the long-haulers to enable them to stay on the road. Gallons of strong "hundred-mile coffee" are drunk by truckers for the caffeine content. Chain smokers, tobacco chewers, and tea drinkers seeking a mental uplift

abound in the trucking industry.<sup>12</sup>

However, stimulation is not confined to the normal retail products that the general public uses. "West Coast Turn-Arounds," Reds and White Crosses have become part of the attraction of the truck stop. The pills are labeled according to their strength, subsequent effect, or particular drug contained in each. Most of these illegal, prescription drugs available to the trucker are generally described as "bennies." Moreover, this short title for benzedrine connotes the popularity of the drug and its general availability.<sup>13</sup> Benzedrine, discovered and dubbed "speed" by the counter culture in the 1960s, stimulates the central nervous system. The effect of the drug varies with each individual, but in general the body functions increase in efficiency. Small amounts of the drug will alleviate and often reverse conditions caused by fatigue.<sup>14</sup>

Truckers take benzedrine to increase the hours that they can spend behind the wheel, but often the drug does not perform that function. With large doses, a person under the influence of bennies may become euphoric, thus take unnecessary risks while feeling immune to accidents. Other side effects include irritability and loss of concentration. Moreover, in some cases benzedrine has no effect. Yet when it does provide increased alertness, the effect often disappears with little warning to the user. Drivers who use pills report that over an extended period of time diminishing returns. When the driver ceases taking the drug, or "comes down," he often suffers a severe hangover much like the condition most often connected with excessive intake of alcoholic beverages. Headaches, muscle cramps, depression, and fatigue usually follow; the period of time necessary for a driver to recover without the aid of

more drugs is extended beyond the normal rest period needed to overcome fatigue of extended hours of work. Also, the drug often causes the driver's teeth to rot.<sup>15</sup>

The availability of pills at the truckstop and the subsequent use by drivers are major concerns of many over-the-road drivers. "Pill heads" are generally considered dangerous and socially unacceptable. Moreover, drivers report many cases of hypnagogic phenomena occurring with more frequency among those who take drugs. One driver questioned about the use of drugs in the industry reported that he had been involved in an accident because of his co-driver's dependency on pills. He had been driving through an isolated farming section in Nebraska, became tired, and asked his co-driver to relieve him. The other driver took a couple of "White Crosses"--about ten grams of benzedrine--and assumed control of the truck while the first driver climbed into the sleeper. A few hours later he woke to find his co-driver in the sleeper with him and the loaded truck traveling about fifty miles an hour across a wheat field. After the truck came to rest, axle deep in mud, the first driver asked his replacement what happened. The response was, "Bennie said he would take over so I gave him the wheel."<sup>16</sup>

The loss of sleep leaves its mark on long-haulers. The one distinguishing feature of all truckers, according to the United States Health Service, is injection and inflammation of the conjunctiva--or, in layman's terms, bloodshot eyes. However, drivers complain of indigestion, constipation, diarrhea, kidney ailments, backaches, hemorrhoid problems, and loss of hearing. One occupational hazard difficult to measure is the seemingly quick aging process of men who have engaged in trucking for a period exceeding five years. The deep lines that

appear on the average man's face after he reaches fifty years can be found on truckers ten years younger.<sup>17</sup> In recent years profits have decreased, red-tape has compounded, and speed limits have been lowered, but the trucker continues to abuse his body as he travels across the nation in search of a high paying load.

The reasons why men truck are as varied as the reasons why any skilled laborer selects an occupation, except for one important criteria--independence. From the moment the engine of a big rig is cranked and the transmission is engaged, the trucker is his own boss. Coffee breaks, the end of the work day, and lunch is neither determined by a factory whistle nor by a time clock; when the driver "damn well pleases," he pulls his rig into a new and different truckstop. Along with this independence comes a high degree of responsibility. A \$60,000 piece of machinery with a \$200,000 payload gives the trucker a sense of immense responsibility and power. Some truckers say the job pays more money than they could possibly make in another occupation, but others proclaim that the salary is not important. Many have quit trucking to take a "regular" job, but have been drawn back by the lure of the open road and the sound of a big diesel rolling on a distant highway.

And truckers are lured into the business by the large sums of money that can be made by an owner-operator. The myth that all truckers make small fortunes continues to survive, but many variables are involved in making a profit. Most of these so-called small fortunes, when all expenses are deducted from the trucker's gross income, are closer to the average skilled worker's wage. Another factor often overlooked is long hours of service. When truckers boast of annual net incomes of more than \$20,000, they probably have worked in excess of seventy hours

per week with little or no time off. A union carpenter or plumber employed in an industrialized state in the North working the same hours, but taking two weeks' paid vacation each year and enjoying other benefits not given the trucker (health insurance, pensions, and sick leave), would make in excess of \$40,000.

When asked why they stay in trucking, drivers who are happy with their occupation respond with one worn-out phrase--"It gets in your blood." On the few days that they are home or have been forced to stop for repairs, truckers get itchy feet and cannot wait to get back on the road. The drivers exhibit an unrestrained optimism in moving up the economic and social ladder with a new, bigger, and more powerful truck. A few highway entrepreneurs look forward to buying an additional truck, hiring a driver for the rig, and hopefully one day become the owner of a small fleet. A few have succeeded, but most hope only for lower fuel prices, an extended interstate system, deregulation, and a more expensive truck.



## FOOTNOTES

<sup>1</sup>Most of the data in this chapter was garnered from seventy-eight interviews with truckers at truckstops located along Interstate 35 and Interstate 40.

<sup>2</sup>See "Strip Teases Featured at Truck Stop," The Wichita Eagle and Beacon, December 14, 1975, 5 D; Jane Stern, Trucker: A Portrait of the Last American Cowboy (New York: McGraw-Hill Book Co., 1975), pp. 1-2; Fred E. H. Schroeder, "A Bellful of Coffee," Journal of Popular Culture, II, No. 2 (Spring, 1967), pp. 679-686.

<sup>3</sup>State Highway Patrolmen often play "White Knight" on the jukebox in response to truckers that play the song "Convoy."

<sup>4</sup>Ross Farland, Human Factors in Highway Safety (Boston: Harvard School of Public Health, 1954), pp. 39-45.

<sup>5</sup>C. W. McCall's recording "Convoy."

<sup>6</sup>Interview with "Tex," December 2, 1975. He was one of the many truckers that refused to give their Christian name.

<sup>7</sup>Ibid.

<sup>8</sup>McFarland, Human Factors, p. 125.

<sup>9</sup>Ibid., p. 127; out of seventy-eight interviews conducted by the author, all long-haul drivers had experienced hypnagogic phenomenon.

<sup>10</sup>Interview, George Blanton, December 1, 1975.

<sup>11</sup>McFarland, Human Factors in Highway Safety, pp. 126-127.

<sup>12</sup>Public Health Bulletin No. 265, Fatigue And Hours of Service of Interstate Truck Drivers (Washington: U. S. Government Printing Office, 1941), pp. 100-101.

<sup>13</sup>Stern, Trucker: A Portrait of the Last American Cowboy, p. 127; see also, Donn Pearce, "Those Truck Driving Men," Esquire, LXXVII, No. 6 (December, 1972), p. 322.

<sup>14</sup>Fatigue and House of Service, p. 101.

<sup>15</sup>Ibid.

<sup>16</sup>Interview, Hugh Thomas, January 12, 1976.

<sup>17</sup>Pearce, "Those Truck Driving Men," p. 322.

## CHAPTER VIII

### TRUCKING CULTURE

Truckstops are at the center of the trucking culture. The size and service offered by the truckstops range from the "mom and pop" diners that offer food and fuel to enormous, multi-million-dollar complexes. The only prerequisite to being called a truckstop is having enough room for the giant trucks to park and the facilities to dispense diesel fuel. Smaller establishments located on the two-lane, primary highway system are more abundant in the Southern states. Many times the combination cafe-and-service-station is owned and operated by a single family. Much of the business is from local truckers. However, the coffee is always strong, the food is plentiful and saturated with grease, and the building and grounds appear to have seen better times.

At the other end of the spectrum is the "Trucker Villages," "Pro-Am Truckstops," or "Truckers Centers." These elaborate truckstops offer the driver an equivalent to the cowboys' town at trails end, or the friendly port to sailors. Anything a trucker could need or desire while on the road can be bought at such establishments. The only services not available for purchase are those not normally sought by a trucker, such as the professional services of a doctor, lawyer, or banker. But the rest is there. As a trucker you can get a room for the night, a shower, a haircut, a massage, a sauna, or a woman. For entertainment, color television is offered along with an assortment of

pinball machines, pool tables, card games, and, in some cases, organized games of chance. The limit of items that can be purchased is almost without end: everything from a complete line of shaving gear and clothing to authentic Indian jewelry made in Hong Kong. Plastic, inflatable Mack trucks, belt buckles displaying major makes of trucks, and bumper stickers with truckers' messages are also available. The trucker buys at these shops because it is difficult for him to stop a fifty-foot tractor and trailer in a downtown area to buy day-to-day necessities, or a toy to bring home to his waiting child. The old myth tourists have spread for years--"to get a good meal, eat where the truckers eat"--was more likely started by a company producing antacid tablets. The only general conclusions that can be drawn by the student of truckstop cuisine will be that it is greasy. Moreover, the trucker eats the same food as other customers, but in larger portions and often at a cheaper price. The main dish, either chicken-fried steak smothered in gravy, pork chops smothered in grease, or meat loaf smothered in ketchup surrounded with mashed potatoes and a choice of one vegetable, is commonly called the daily special. The one advantage the trucker has over the tourists is speedier service. The special sections set aside for truckers means a lower booth-to-waitress ratio and a cup of coffee that neither gets a chance to become empty nor cold. By ordering the daily special the trucker can eat his meal, drink several cups of coffee, and exchange a few anecdotes with other truckers and be back on the road in thirty minutes.

One general observation about trucking culture that remains true is that all major truckstops have the same motif. Each restaurant is sterile. The countertops are Formica, the booths are vinyl, the floors

are terrazzo, and the rest is stainless steel and glass. Attempts to decorate with plastic flowers, western prints from dime stores, Spanish paintings on velvet, or cute milk dispensers in the shape of a cow add to the starkness. However, truckers are not looking for the aesthetic, but they do demand one element to appeal to their senses--a jukebox. Two things are for certain at a truckstop: the waitress will always be pouring coffee and the jukebox will always be belting out country and western music.

If the restaurant is not crowded and the jukebox is silent, waitresses will request that a trucker put money in the machine and play her favorite song. At other times the more gregarious women will use her tip money "to match" the trucker to decide who will fund the noise machine. It goes without saying that trucker songs receive the most requests.

Employees at truck stops take on the qualities identified with the drivers. Smiles are rare. Waitresses appear on the verge of being friendly, but they always keep an aloofness between them and drivers for fear some driver might mistake friendliness for sexual advances. Drivers flirt with the waitress as if it is required. The older and more efficient waitresses work the section marked "for truckers only." After years of waiting on tables these women have heard every "come on," and by a long repetition, they have become experts in quick retorts. The natural look that has become popular among American women as a result of the youth movement has not made its impact on women in roadside restaurants. Their styles belong to the 1950s except for the shortened length of their pastel or white--and slightly soiled--uniforms. Heavy and bold makeup combined with bright red lipstick adds to

the surrealistic appearance of their permanently stacked, sprayed, and often bleached hair. They are cool, efficient, and impersonal, a mixture that blends well with the neon and plastic of the truckstop.

Providing personal services for the trucker is not where the truckstop gains most of its profit. The extras, including rooms, food, and entertainment, are to lure truckers in from the road to the fuel pumps or service area. It is easy for a trucker to spend three hundred dollars for fuel and maintenance during a single stop, and excellent personal services results in repeat business. At large truckstops more than 1,000,000 gallons of fuel will be sold each month to more than 20,000 truckers. In an effort to attract repeat business, managers of these stations provide many things; as one manager stated, "What the trucker wants, the trucker gets."<sup>1</sup>

One aspect of the workingman's culture is missing from the truckstop: alcohol. Drivers who will not resist taking pills to stay awake on long trips will abstain from consuming any alcoholic beverages. Many truckers admit to drinking heavily while off duty, but they consider drinking and driving a taboo of their occupation.<sup>2</sup> However, many other forms of special entertainment are available to the trucker, some from business establishments located close to the truckstop (often owned by the same individual) and others available in the truck parking lot.

Religious, traveling gospel shows, housed in semi-trailers, provide Sunday services conducted in truckers' language. While denouncing the sins and evils of governmental regulation, pills, and prostitutes, these preachers promise fire and brimstone for sinners reminiscent of the tent evangelists of fundamental sects during the 1950s. The mixed

metaphores used to sway the driver to "take Christ into their heart" appear to have been garnered from some country and western song that failed to make the charts. Highway evangelists are not new to trucking, but only in recent years have they attracted a sufficient following to expand their operations. One evangelist has a fleet of trucks, allowing him and his fellow ministers to deliver the gospel at truckstops across the nation. The most famous minister trying to convert truckers is Jimmy Snow of Nashville, Tennessee. The son of country and western star Hank Snow, Reverend Snow, besides saving the souls of truckers, produces a religious program at the Grand Ol'Opry. Although the main thrust of his religious instruction is aimed at the country and western stars of Nashville, Reverend Snow attempts to reach truckers through the use of citizen band radio.<sup>3</sup>

The fundamental and decidedly Southern religious instruction given to truckers is evident at truckstops' gadget shops. Rhinestone studded crosses, plastic replicas of Jesus, and paintings of Christ leading a truck to safety adorn many gift shop walls. Chapels, constructed at many truckstops, display paste-on stainedglass windows and provide additional religious sway to bring the wayward driver back to the fold.<sup>4</sup>

For truckers who have not given up their sinful ways, as well as for those trying to walk the straight and narrow, truckstops offer many secular temptations. The parking area where the churches on wheels park to fill their pews also contain roving prostitutes selling their wares. These working girls go from truck to truck asking the driver if he wants to "have a good time." With the aid of CB radio, this appeal can now be made over the airwaves. Prostitutes, although not present at all truckstop parking lots, sometimes are housed in brothels located

adjacent to larger truckstops. In the small towns of Nevada, where prostitution is legal, truckers constitute a large percentage of the patronage at houses in red light districts.<sup>5</sup>

If the trucker is interested in looking instead of buying, a wide range of topless, bottomless, and even all-nude truckstops await his attention along the interstate.<sup>6</sup> Truckers Valley, located seven miles east of Wheeling, West Virginia, is a prime example of what is offered the trucker as he travels across the nation. The Windmill Truckers' Center, one of three truckstops on the Dallas-Pile exit of Interstate 70, typifies the large truckstop. The multi-million-dollar business is a trucker's shopping center and more. The owner, Lee Glasnor, estimates that 484,000 truckers each year buy 30,000,000 gallons of fuel from him; to maintain this average, each twenty-four-hour period more than 400 trucks have to visit his establishment.<sup>7</sup>

The side attractions in Truckers' Valley fill most of the drivers needs and desires that cannot be satisfied with food and fuel. For the literary enthusiast, there is an adult book store offering a wide range of pocket books and magazines to be purchased, read, and then tucked away in the glove compartment. For those who want the same stimulation but prefer a different media, an adult movie theater that offers double-features is available. For remaining truckers not included to spend their money on photographs, racy novels, and celluloid, the Lucky Lady Lounge features erotic dancers to stir their imagination. The Lucky Lady, like most establishments in states where whiskey cannot be sold by the drink, is a private club. However, the first visit is free when a two-dollar membership card is bought, which happens to be the admission charge for card-carrying members. West Virginia's laws prohibit



dancers from appearing in the nude, so the dancers usually wear at least a gold chain around their waists. For drivers who wish to rest, two motels provide rooms, and for truckers worried about their physical well being the "King of the Road Health Club" replenishes their tired aching bodies and fulfills some of their fantasies.<sup>8</sup>

A social hierarchy and class consciousness has developed at such highway cultural centers. At the base of such rankings is physical appearance, both of dress and personal style. Cowboy attire of the modern variety--lizard boots, Levi jeans, sculptured leather belts, giant shiny buckles, plaid shirts (always long sleeve, but the wearer is allowed to double roll them to three-quarter length or even up to and past the elbow), an occasional cowboy hat--has become the socially accepted uniform of the truck driver. Although some aberration can be found among truckers, most will wear enough of the accepted clothing to withstand the critical judgment of their peers. On rare occasions older truckers who have survived the rigors of trucking for twenty years can be seen in truckstops dressed in kaki pants and shirts with a soiled Stetson hat cocked on their heads. Moreover, young people of the late 1960s and early 1970s who have entered trucking have brought with them the unorthodox style of the counter culture and have affected dress codes. More truckers are sprouting beards, adorning themselves with jewelry, and displaying patches on their denim clothing.

Hair styles range from the clean look of the 1950s, including flat-tops, burrs, and Princetons, to the Elvis Presly, ducktail-in-the-back and greasy-curl-in-the-front look. The average driver cares little for the styled, razor cut, fluff-dried look popular among the college age generation, but instead he lets his hair grow over the tops of his ears,

his sideburns below the bottom of his ears, and, in the back, his hair will often touch his collar. The mens' hairspray industry has found few customers at truckstops; the old commercial that "a little dab will do you" appears to have made its impact on most drivers. Some would conclude that the pragmatic trucker has realized that if one dab works well, two dabs will do wonders. Differences in hair styles between truckers reflect the differences between the hair of such superstars in country music as Dave Dudley, C. W. McCall, and Conway Twitty.

The second most noticeable attribute of the trucker on top of the social scale is personal style. They swagger from truck to restaurant and as they mount a vinyl, rotating stool at the counter; they assume a casual, almost slouched, posture while drinking coffee, and they conduct gentle flirtations with the waitress; all these require large amounts of tactfully displayed masculinity. The trucker has to maintain a nonchalant attitude and temper his actions as well as dress so as not to draw undue attention. The greenhorn, resembling the historical "city dude" in the West, often exaggerates his walk, wears brightly colored western shirts, or talks too loudly. It is easy to spot the young man not yet totally acquainted with truck-driving culture as he timidly sits in the section marked for truckers only and nerviously glances from side to side, looking for approval.

The restrictions placed on the drivers' actions and dress do not apply to his most prized possession: the command of a diesel powered tractor. Design, be it cab-over (the cab placed directly over the engine to reduce the total length of the tractor) or a conventional configuration makes little difference. Drivers have personal preferences on design, for each has distinct merit. The shorter, cab-over rig

allows the driver to pull longer trailers and gives greater visibility, a shorter turning radius, and a hinged body that allows easier access to the engine. However, the cab arrangement puts the driver closer to the engine which results in more interior noise and vibration. The conventional cab arrangement, with the engine in front of the cab, provides greater protection in case of an accident, and the weight of the engine at the front of the vehicle provides a smoother ride by reducing the buckling effect of the trailer. Also the longer wheelbase on the conventional cab enables the vibrations encountered from a rough spot on the road to be muffled by the front suspension before the rear wheels come in contact with the same irregularity.<sup>9</sup>

The two types of tractors are equipped with the same engines, transmission, and accessories. But the conventional tractor, with its long, lacquered hood and massive chrome grill, awes not only truckers but also most mortals who drive automobiles. Of the top-of-the-line models, Kenworth conventionals are considered to be the best, and drivers of the so-called "K-Whoppers" are the most envied. Drivers of the expensive and most powerful rigs take great pride in selecting the right interiors, custom paint jobs, and the amount of chrome fixtures. In his daily routine of fulfilling the role of a trucker, the driver is confined in action and dress, but in adorning his truck there is no such limit.

As one trucker put it: "I spent more time selecting my truck than I did in picking out my old lady." Personal touches cover a wide spectrum of practical considerations mixed with gaudy display of conspicuous consumption. The accessories that can be purchased on a truck include all those made available by automobile manufacturers and many

more. Seats with adjustable mechanical and air shock adsorbers smooth out the jarring ride, while the feel of Naughahyde provides added comfort and aesthetic value. Electronic conveniences abound: citizen band radio, quadrophonic stereo, AM-FM radio and tape player, rader detector, and an instrument panel that appears to be copied from a Boeing 747 grace the firewall. Shag carpeting and a custom console give the driver some of the comforts of home, and, with the extra-wide and long sleepers measuring three feet by eight feet, the driver can sleep in comfort. The price tag is \$3,000 above the average price paid for a house constructed in America in 1975. With an investment of \$45,000 the owner-operator takes to the road hoping that he can log enough miles to make his payments.<sup>10</sup>

The tractor plays an important part in the trucker's life. His sense of personal identity, masculinity, power, and pride thereby is displayed for other truckers. Moreover, the tractor provides him his sole source of income and, at the same time, becomes a home. It is no wonder that most truckers want to add personal touches: their mother's name on the fender, flames scalloped from the grill back across the hood, or their handle (their nickname or name they use on the CB) printed in perfect detail on the doors. The design and color scheme painted on trucks most often are not haphazardly chosen, but are a result of many hours of planning and dreaming. Truck manufacturing companies realize the importance of personalized rigs and utilize a wide range of options to sway drivers to buy their product.

Kenworth, one of the top custom truck builders in the world, offers optional equipment that will fit almost any need. Its self-proclaimed, and often repeated title, "Royals Royce" of trucks, refers

to engineering and options, but the price tag more properly refers to an economic class. Kenworth has made its reputation by building a top-quality, lightweight body and offering a long list of proven, name-brand engines, transmissions, fifth wheels, and axles as optional equipment. The company does make trucks that have standard equipment. A typical example is the W-900 series. The cab, constructed of aluminum and fiberglass, the frame of die-quenched steel, the fuel tank of aluminum, and the suspension, heater, electrical and cooling systems by the Kenworth company. However, the front and rear axles are made by Rockwell, the alternator by Motorola, the engine by Cummins, and the transmission by Fuller.<sup>11</sup>

The optional equipment list, including equipment made by Kenworth, provides replacements for almost all parts. The Rockwell axles can be replaced with Eaton's equivalent, the Motorola alternator can be replaced by any one of the thirty-eight other transmission models offered. The standard six-cylinder, 855 cubic inch, 290-horsepower Cummins engine could fall victim to any one of the four Caterpillar, six Detroit Diesel, or eleven other Cummins engine models that appear on the options list. The most powerful and most sought after is the twelve-cylinder, 456 horsepower Detroit Diesel.<sup>12</sup> Cummins builds a competitive 450-horsepower plant, but in the race for bigger and more powerful engines Cummins has developed and is now testing the KT600 with a rating of 600 horsepower.

After selecting the drive train that will move the truck down the road at the pace and ease he desires, the trucker selects the style in which he wants to travel. Again specialty companies stress personalized, custom, made-to-order trucks catering to the independent nature

of each driver. Truckers pay as much attention to the outside appearance of their trucks as they do to the mechanical options, and truck companies extend themselves to provide a variety. Kenworth Truck Company's paint brochure offers suggestions for "paint schemes," and promises; "We won't give you any of this one-design, three-colors-to-choose-from business!"<sup>13</sup> Future customers are invited to look at company designs, but at the same time it is prepared to use any of the hundreds of paint colors available to produce a personal design created by the trucker.<sup>14</sup>

The cab-over-engine models with a sleeper attachment have fourteen company designs with suggested colors. The names given each design have been borrowed from famous and often historical towns of the Northeast where the short tractor is necessary because the maximum length laws in that region are shorter than the national average. Bostonian, Lexington, Yorktown, Georgetown, Salem, and Monticello are neither part of a roll call of placenames of the American Revolution nor of Kenworth's contribution to the bicentennial, but design patterns on a few of their cab-over-engine trucks. Conventional trucks have similar regional connotations attached to design models. However, the conventional is a Midwestern and Western truck, and the names imply open spaces, majestic places, and frontier heritage. The West Coast trucker can select from the Sequoia, Olympic, Willamette, Columbia, Rainier, Yosemite, or Shasta models. The trucker that identifies with the Midwest or Southwest also has a wide selection: Big Horn, Carlsbad, Rio Grande, Dakota, Laramie, and Aztec. The Southern driver can also feel at home with the Blue Ridge, Ozark, or Dixie models.<sup>15</sup>

If the trucker is interested in other accessories, these are

available: fog lights, flood lights, red lights, amber lights, air horns, dual exhaust pipes, and "as much chrome and stainless steel as you want."<sup>16</sup> For driver comfort and safety an auxiliary defroster fan, air conditioner, outside sunvisor, powered window lift or power adjusted, and chrome mirror with a heating element can be installed.<sup>17</sup>

The only luxury item that most truckers will not purchase is an automatic transmission. The skill involved in shifting twenty gears to maintain maximum speed and power not only requires the driver to listen to the engine and read a tachometer (which registers the revolutions per minute of the engine), but also gives the driver a feeling of control and power. An automatic transmission with seven forward gears is almost as efficient, but is much more effeminate. The cost of an automatic transmission above a manual model is also sufficiently high to lower demand. Therefore most sales of such transmissions are to companies engaged in overseas trucking operations where the natives have had little training in the skills necessary to shift twenty gears. Purchasing agents for major firms realize that the \$6,000 invested in an automatic transmission will reduce accidents and lower the total amount of time it takes to train foreign truck drivers.<sup>18</sup>

The most impressive feature of the modern truck is the interior of the cab. The "ultra-luxury and handsome appointments" that grace the sleeper provide a "bedroom on wheels." The Kenworth top-of-the-line luxury package is the V.I.T. (Very Important Truck). With "the prestige of a thoroughbred, and the comfort of a Rolls Royce," the trucker is offered the ultimate in luxury, convenience, comfort, and prestige which he has "worked so hard to achieve." The sleeper lives up to the trucker's expectations; the bed holds a normal size, twin

mattress in the conventional truck and has an optional full-sized mattress in cab-over models. The eight-foot wide, five-foot deep sleeper is lined with "luxurious diamond-tuffed upholstery with accent buttons." Included within the sleeper is a twelve-volt cigar lighter, a full-size closet with separate light, two shelves for books, shaving kit, and a portable television. For convenience, there are separate controls for the heater, air conditioner, radio speakers, and interior lights mounted next to the bed.<sup>19</sup>

Although the V.I.T. sleeper looks like a playboy pad instead of the inside of a truck, Kenworth, in honor of the American Revolution and in order to sell more trucks to husband-wife trucking teams, has produced a limited number of "V.I.T.-200, Bicentennial Kenworths." The cab in these offers all of the luxury items of the average V.I.T. plus a taller sleeper with vista cruiser windows, electrical hookups for 110 volts of alternating current, and a chemical toilet, which the salesman promises will not splash, spill, or stink. And, of course, the Bicentennial seal adorns the truck body, which is basic with red and blue trim.

Such expensive rigs most often are purchased by owner-operators, but the trend is changing. Fleet owners report that the more expensive trucks attract better drivers, and the truckers will perform more mechanical, washing, and polishing duties, and generally take better care of a new, shiny, luxury vehicle. Moreover, drivers take pride in working for a company that buys better equipment, thus reducing the employee turnover rate and loss due to freight and tractor damage.

The giant tractors represent \$50,000 of chrome and stainless steel, fiberglass and aluminum, and steel and vinyl. They are more



than symbols of the power, sex, speed, and free spirit that Americans have attached to the motor vehicle. They are more than the myths associated with the transporters of goods. They are the self-expressions of men who have independence, displaying their frontier pride in being a part of a romantic occupation.

FOOTNOTES

<sup>1</sup>Wendell Rawls, Jr., "Strip Teases Featured at Truck Stop," The Wichita Eagle and Beacon, December 14, 1975, p. 5d.

<sup>2</sup>Public Health Bulletin No. 265, Fatigue and Hours of Service of Interstate Truck Drivers (Washington: U. S. Government Printing Office, 1941), p. 101.

<sup>3</sup>Jane Stern, Trucker, A Portrait of the Last American Cowboy (New York: McGraw-Hill, 1975), p. 98.

<sup>4</sup>Ibid.

<sup>5</sup>Richard Symanski, "Prostitution in Nevada," Annals of the Association of American Geographers, LXIV, No. 3 (September, 1974), p. 373.

<sup>6</sup>Stern, Truckers, p. 116.

<sup>7</sup>Rawls, "Strip Teases Featured at Truck Stop," p. 5d.

<sup>8</sup>Ibid.

<sup>9</sup>Interview, Don Mann, Salesman, Kenworth Co., Oklahoma City, Oklahoma, March 17, 1976.

<sup>10</sup>The Kenworth Truck Company dealership in Oklahoma City, Oklahoma, in 1975, sold the top-of-the-line trucks for an average price of forty-five dollars. However, one truck was ordered in March of 1976 that cost the customer fifty-two thousand dollars.

<sup>11</sup>Advertisement Pamphlet, W-900, Kenworth Truck Company, 1974.

<sup>12</sup>Ibid.

<sup>13</sup>Advertisement Pamphlet, Kenworth Paint Schemes, Kenworth Truck Company.

<sup>14</sup>Ibid.

<sup>15</sup>Ibid.

<sup>16</sup>Advertisement Pamphlet, The Kenworth W-900, Kenworth Truck Company.

<sup>17</sup> Pamphlet, W-900.

<sup>18</sup> Interview, Don Mann.

<sup>19</sup> Advertisement Pamphlet, V. I. T. Kenworth Truck Company.

## CHAPTER IX

### TRUCKING FOR A LIVING

Owner-operators and drivers who are paid by the freight mile make a living by staying on the road. If he owns his own tractor, the trucker is most often saddled with large payments, enormous fuel bills, and equally large sums for general maintenance. Therefore the trucker who grosses \$50,000 a year, if no unusual expenses are incurred, will net approximately \$20,000. But trucking is a precarious occupation. Making money depends on economy of operation and the availability of high-paying loads.

The owner who drives his own rig has several options from which to choose while seeking freight. The most common arrangement is the brokerage system. Brokers obtain loads for the trucker and he is reimbursed for his efforts with a small percentage of the freight rate. Other truckers lease their equipment to a freighting company and receive a percentage of the fee that is charged to the customer. Another option for the trucker is to make a contractual arrangement with a firm to haul only their goods at rates based on freight-ton-miles traveled. The most independent of the group is the "Gypsy" trucker who will "haul anything that is loose at both ends" and finds his own loads. The arrangements made by the trucker most often are not easily defined; instead of having clear cut black-and-white agreements between trucker and shipper, the independent trucker operates in a grey areas. Many

times the commodity that is being hauled dictates the arrangement between shipper and trucker. Where special equipment is needed, greater speed required, or regular trucking schedules are maintained, contractual arrangements are made. When shipments are sporadic, seasonal, or less-than-truck-load lots, the brokerage system or Gypsy truckers have the advantage.

The system under which the trucker makes his money becomes even more confused when he is engaged in more than one type of economic arrangement. A trucker based in Florida will carry a load of oranges to Wisconsin as a common carrier, pick up a partial load of butter under the brokerage system, and fill the rest of his trailer with packaged meat from the Chicago stockyards under a contractual agreement. The return load will be delivered to Florida and the same scheme repeated.<sup>1</sup>

The most structured of all systems occurs in the household moving industry. The few major firms that control the majority of household goods movement in the United States often lease tractors from owner-operators and give the owner thirty cents per mile and pay more than one dollar per hundred pounds for loading and unloading cargo (other companies pay fifty percent of the gross profits on each load). The shipping firm provides the trailer with its name painted on the side, furniture pads, and dollies and the upkeep of the trailer. The tractor owner drives his own truck and pays for the fuel, maintenance, repairs, and labor for loading and unloading goods. The driver has to pay a minimum amount, approximately fifty dollars, for broken items and up to 300 dollars for lost items on any single load.<sup>2</sup>

Interstate Commerce Commission regulations limit the number of small firms engaged in the household moving business by limiting the

number of operating certificates. Therefore, four firms dominate the industry. Each of the major firms operates with the same basic approach for cost to customers and pay for the trucker. The system starts to operate when an informer, who is paid as high as a five percent commission for his service, relays information to a moving broker, or the person who is moving calls the local office of a moving company. The local office is manned by a broker who is paid a commission for booking the move and most often is not an employee of the moving company. Once the future customer is satisfied with the cost estimate given over the telephone, the agent will come to the customer's residence and estimate the moving cost, the day the van will pick up the load, and the day that the household effects will arrive at their destination. All the information gathered by the broker is then relayed to the national or regional company headquarters, and the company dispatcher then determines when the load can be picked up. If the customer is lucky, the truck assigned to haul his household goods is on time and the broker did not overbook the hauling capacity of the firm.<sup>3</sup>

"Bedbud Haulers," a truckers vernacular for household movers, are most often victims of circumstances. If during the busy summer months they arrived two days late to pick up a load, they feel the wrath of the angry customer, when it is the broker or dispatcher who was at fault. The same system applies when they are two days late to unload. Although sometimes a truck breaks down, most often it is not the trucker's fault but the broker's for promising the customer everything in order to earn a commission. Moreover, the truck will contain more than one customer's freight, and the trucker is responsible to deliver the loads according to the dispatcher's instructions. National accounts,

those that are made with major corporations to haul their employees' household goods, usually take priority over those of the general public, and often a trucker is ordered to unload and store the cargo he has in his truck in order to pick up a national account.<sup>4</sup>

Moreover, when the trucker arrives with the goods, the customer is supposed to have the cash on hand to pay for the transportation service. If he does not have sufficient funds to cover the cost, the trucker cannot unload. Often the customer is unprepared to pay the amount due because the broker made an estimate far below the actual cost. Other times when he arrives at the residence, the customer is not there or it is raining and he has to wait with no reimbursement for his lost time. If the customer is there with the money, the unloading takes place. The helpers the trucker hires to aid him in unloading the truck are not employed by the moving company, but usually are part-time laborers who drift between moving company agencies. Some are on call, but most workers are seeking part-time employment during summer months. The hourly rate, between three and five dollars, is a premium wage for the quality of labor that can be expected from the helpers.<sup>5</sup>

The trucker faces other problems of actual and alleged breakage and loss of goods which he transports. Although he inventories each piece and notes its condition, customers will argue that a table has been scratched or a box of china has been lost when in fact the table was worn beyond repair when it was loaded and the box of china nonexistent. If the customer is persistent enough, the driver will have to deduct another \$350 from his gross profit. However, the customer often has legitimate complaints. If the van arrives two days early, the load is stored in a warehouse and the customer is charged for

storage. If a national account bumps a client's goods, delivery could run one month behind schedule. Furthermore, when household goods are inventoried before they are put on the truck, all furniture, whether new or old, is listed as being in poor condition with numerous scratches, marks, and stains. This makes it almost impossible to get compensation for freight-damaged goods.<sup>6</sup>

The rates charged customers are based on various tariff schedules on a per-mile, per-one-hundred-pound freight rate. Rates vary according to city, state, region, and direction the goods will travel. Since the rate schedules are set by different rate bureaus, these become so complex that it takes a rate expert and a computer to figure out the charge. The layman has no idea how the final bill is computed, and many times falls victim to a misplaced decimal point or faulty addition which cannot be detected in the final bill of lading. The regulated system also allows the unscrupulous driver, dispatcher, or trucking accountant to pad the freight bill.<sup>7</sup>

The total weight of the customer's household goods is determined by weighing the empty truck and subtracting the empty weight from the loaded weight. In order to cheat the system, the trucker first weighs the vehicle while the fuel tanks are empty and he and his helpers are out of the truck. When the trailer is loaded, he stops for fuel, then has the truck reweighed with three men in the truck. The added weight then becomes part of the load, and the customer pays extra.<sup>8</sup>

The bedbug hauler has a unique position among truckers--he has to handle customer relations. But the other speciality haulers have their own problems. The bull hauler--drivers who haul cattle--is in constant danger of the cattle shifting and "bunching up" to make the load uneven;



thus he loses control of the trailer. Also, he has to make certain the cattle stay standing up so that they will not go into shock and die. There also is the problem of loading and unloading spooky cattle and the constant odor and distasteful task of cleaning out the trailer. Steel haulers are always aware of the danger of the load "coming loose," and the uneven load causing the rig to flip over when drivers are negotiating a turn. However, for the steel hauler the greatest of all fears is a front-end collision. The inertia of the moving truck will snap the chains or bindings on the steel, and without restraints the steel will come crashing through the cab. The driver that pulls a flatbed--a trailer without sides--is required to "tarp" most loads. These heavy tarpaulins have to be stretched tightly over the load to prevent wind and water damage to the cargo and require several hours to tie, constant vigilance, and repeated tightening. When truckers are hauling by the mile, the time spent tarping is part of their free service. One trucker was disgusted when he loaded two heavy and rusted industrial laths onto his flatbed trailer and was told by the shipper they had to be tarped. On his trip from Chicago to Dallas the tarps had to be re-tied many times, on one occasion in a driving rain storm. When he unloaded the laths, the junkyard owner in Dallas told him that they could be put anywhere in an adjacent pasture.<sup>9</sup>

The dangerous loads truckers carry are not, as the movies would have us believe, dynamite, nitroglycerin, or munitions. Most truckers shy away from liquids, unbalanced loads, or swinging beef. The latter of the group is considered by most as possibly the worst load to carry. The beef hangs from hooks attached to the top of the trailer, and when the truck is in motion the beef sways. If the conditions of the road

compel the trailer to sway or vibrate, the beef will begin swinging until the driver loses control of his truck. Some truckers also are skittish about pulling "double bottoms." Tandem trailers, which are allowed in some states, are relatively safe when traveling down interstate highways under normal conditions. However, when roads are slick from rain, when wind velocity is high, or when patches of ice and snow are scattered across bridges and shady areas of the road, hauling double bottoms can be the most dangerous of all loads. When the rear trailer starts swaying from side to side, the driver can do little corrective driving that will prevent a jackknife except slowing down and hoping for the best.

One of the ever-present dangers is neither from trailer cargo nor equipment failures, but from hijackers. High-value loads, such as cagarettes, liquor, and copper ingots, which can have a net value of more than \$200,000, are prime targets for hijackers. Moreover, other products such as television sets, radios, beef, small appliances, and other high-value products which can be sold on the black market and which are not easily identified as stolen property, are subject to the highwayman's craft. The incident of hijacking has remained high since the early 1920s, and most truckers know they might be the next victim; thus they are reluctant to tell anyone what they are hauling. During the decade, 1920-1930, gangsters would pull up a truck, display a machine gun, and tell the driver to pull over to the side of the road. One member of the gang then would drive the truck to some remote spot where it would be unloaded. Often, the driver would be blindfolded and left on a lonely road unharmed. The high incident of hijacking in Chicago in the 1920s and 1930s forced many insurance companies to cancel

policies for trucks entering the area, and many truckers refused to haul freight into Chicago.<sup>10</sup>

Now many truckers carry pistols in their trucks and are more than willing to use them when threatened. While in large cities, truckers back their trucks up to a building so that the trailer doors cannot be opened until the truck is moved. One driver refused to haul to Chicago because he had to banish his pistol to chase off three separate attempts to break into his trailer during one night, only to wake up the next morning to find that the bottom of his trailer had been cut open and almost all of his load stolen. One favorite strategy of hijackers is to wait at a stop light in an industrial section until a truck stops for the light. Then a man will jump on the step of the truck, stick his pistol in the window of the truck, and force entry.

Hijacking is not confined to major cities but often takes place at truckstop parking lots, either by force or deception. One of the shams that has become legend starts with the trucker sleeping in his truck at the truckstop parking lot. A man will tap on the truck door and say, "Good buddy will you pull your rig up, you have me blocked in." Half asleep and wanting to help his fellow trucker, the driver will move his tractor forward and then return to his sleeper. When he wakes up, the embarrassed trucker finds that his trailer is gone. The hijacker has jacked up his trailer, and when the trucker moved forward the hijacker hooked his tractor to the trailer and created another good truckstop anecdote.

Truckers are not immune to accepting a bribe to let themselves be hijacked, but most truckers are content to making small profits from other types of illegal and unethical activities. Some freight lends

itself to an illegal exchange of goods and money. For a small bribe, a dock foreman will load an extra 100 pounds of steak on a truck which can be traded for 100 gallons of diesel, or the trucker can use the steaks to trade for other merchandise or to bribe the company dispatcher to receive a higher-paying load. Items that are strictly regulated and have a high value take more ingenious methods of chicanery. One prime example is liquor. Every case is counted and recounted, and the driver is held responsible for any loss. Broken bottles have to be turned in with the seals intact, but the inventive trucker can salvage the expensive booze by cutting out the bottom of the bottle and draining its contents without breaking the seal. After draining most of the bottles in a case, the rest of the bottles are broken to provide proof of the alleged accident.

If the trucker is driving a company-owned rig, buys his fuel, and has his maintenance done at a friendly truckstop, he can receive up to ten percent cash rebate on all costs, and the owner-operator will be given padded bills to provide income tax relief. Some truck owners illegally burn farm fuel or heating oil in their tractors to avoid paying federal road taxes. Truckers also sell and barter for stolen merchandise to add to their trucking profits without much risk of being apprehended. Often one load of illegal goods will net the trucker as much profit as six months of hard driving while hauling standard goods. The illegal cargo, ranging from "Mexican bennies," untaxed cigarettes and whiskey to hijacked goods, can bring as much as twenty thousand dollars to the driver which will take the risk. Some "hot" vargos, including overweight loads, and shipments that a company does not have an Interstate Commerce Commission's certificate for transporting are low

hauls. Many underpaid scalemen at ports of entry will turn their heads for a few dollars.

Graft, corruption, and illegal activities occur in an industry where union leaders are connected with the underworld, and workers falsify trip logs, admit to breaking state weight laws, and constantly break speed limits. In the trucking business breaking the law does pay, and law enforcement is lax. Conservative estimates are that ninety percent of the long-haul truckers either keep two sets of logs to evade the not-so-watchful eye of the Interstate Commerce Commission's agents, or they openly violate the law by entering false information, knowing that the agents will not bother to check its authenticity. Weight stations are easily avoided by using back roads or waiting for them to close. State speed laws are probably the most entertaining statutes to break and one of the least enforced of all the laws affecting the trucker.

Most of the truckers that break the law are not stealing goods, but are dodging regulations. Some think that the Department of Transportation, Interstate Commerce Commission, and state transportation officials are conspiring to take away free enterprise. One tired, old trucker summed it all up when he said, "Everybody on the road that is wearing a coat and tie has the authority to check your logs, and fine you for having one of your lights out. It's like dealing with the Gestapo."<sup>11</sup> The price of fuel, insurance, and tractors have risen in recent years while profits and speed limits have declined. The independent trucker wants to be left alone--he wants the government out of the market place.

With all of the drawbacks of trucking the owner-operators continue to complain but do not seek other employment. The reason they

stay in an occupation that is becoming more regulated and more difficult to make profits is twofold. Some truckers say it is the only skill that they have; they will not work in a union shop; and they will keep trucking until the profits decline to the point where they cannot make a living. Others give the answers that will keep a future generation of social commentators reporting the romantic myth of truckers. Many are drawn to trucking for the independence that it offers; they are driven away from the monotony of the factory; they are attracted to the powerful machines; and they are lured by the opportunity to travel to distant cities. Whatever title you give it, whether it is a romantic job attachment, a search for masculinity, a symbol of the American free spirit, or the call to the open road, it keeps the truckers trucking.

FOOTNOTES

- <sup>1</sup> Interview, Hugh Thomas, January 12, 1976.
- <sup>2</sup> Susan Sheehan, "On the Road With a Bedbug Hauler," New York Times Magazine (November 12, 1972), p. 36.
- <sup>3</sup> Robert C. Fellmeth, The Interstate Commerce Omission (New York: Grossman Publishers, 1970), pp. 226-239.
- <sup>4</sup> Ibid.
- <sup>5</sup> Don Pearce, "Those Truck Driving Men," Esquire, LXXVIII, No. 6 (December, 1972), p. 328.
- <sup>6</sup> Fellmeth, The Interstate Commerce Omission, pp. 230-235.
- <sup>7</sup> Ibid.
- <sup>8</sup> Ibid., pp. 236-237.
- <sup>9</sup> Interview, "Tex," December 2, 1975.
- <sup>10</sup> P. J. Russell, The Motor Wagons (Akron: The Pioneer Motor Traffic Club of Akron, 1971), pp. 131, 268.
- <sup>11</sup> Interview, "Tex," December 2, 1975.

## CHAPTER X

### CONCLUSION

Today the trucker's world is in constant flux. Although the stereotype of the rugged masculine truckers remains etched in the minds of the public and in the songs of country and western singers, the trucker's private, macho domain is rapidly diminishing. The presence of twenty-five thousand women teamsters bears silent evidence of the changes which began after the end of World War II. And the enemy which has brought all the alterations which most veteran truckers hate is technology--the friend which has made their lives easier.

The United States entered a period of almost unlimited growth and technological advance after World War II. Scientists and engineers--spurred by wartime progress--made daily discoveries which shattered traditions and replaced sweat with horse power. Evidence of these changes prevades the trucker's life today. No longer is the driver who hauls vegetables required to load the trailer by hand. The cargo is neatly boxed in insulated crates, and is stacked easily into the trailer by automated fork lifts. No longer does driving a truck require bulging biceps and a cold iron spine. The bench seats and direct steering have been replaced by cushions and power steering. No longer is the trucker required to be a skilled mechanic or to change huge truck tires. A call on the Citizen Band radio will bring a tow truck or tire repair unit to the scene in minutes and the trucker soon is back on the road.



The introduction of the "CB" radio probably has created more change in trucking than any other factor. This too was originated soon after World War II. The widespread construction of divided highways created the need among truckers to communicate with one another by preventing the usage of a complicated system of hand and light signals that had previously been utilized. Realizing this need, the Federal Communications Commission set aside twenty-three radio channels for citizen usage in 1946, and 1947 the first CB licenses were issued. In no other aspect of the trucker's domain is the invasion of the outside world more apparent than regarding the citizen band radio.

Originally the radios were used to tell other truckers of danger ahead or to warn them of upcoming speed traps. For two decades they fulfilled this purpose, and the air ways were the domain of the trucker. However, by the mid-1960s truckers were finding other uses for the electronic gadget. Since the inception of the long-haul one of the major problems had been truck malfunction in some desolate area. These ranged from a flat tire to engine or transmission troubles. Whatever the problem the driver was faced with correcting the situation or waiting for some friendly stranger to transport him to help. A simple solution was to equip the truck with a two-way radio; when difficulties arose help could be called to the spot.

This innovation was accompanied by the creation of mobile repair units. Trucks were loaded with all the equipment needed to repair the broken giants, specialized units were constructed to manage the changing and repairing of tires. All a driver needed was the ability to drive. He did not have to be a mechanic. Women soon found that with power steering, power brakes, automatic transmissions, and hydraulic

seats driving a truck was no longer a "man's job."

Although the security of instant help offered by the CB radio physically changed the trucker's world, the most drastic alterations brought by the radios in breaking down the invisible barrier that existed between the trucker and non-trucker. The driver was a man apart, hidden from the world in his truck, segregated from others even in the cafe, where signs demanded: "Truck Drivers Only."

Although CB sets had been available to the general public since the issuance of the first license in 1947, most individuals had little use for the expensive and exotic equipment. Oddly it was an international incident that made the radios one of the most sought-after appliances in America. In 1973 the United States was denied Arabian oil by an embargo. To conserve available fuel the federal government forced the states to adopt a comprehensive fifty-five-mile-an-hour speed limit. The nation's truckers were sharply affected by this limit--and accompanying fuel price increases. The problem finally resulted in a nation-wide independent trucker's strike. Both trucker and individual driver were concerned with the new speed limit.

Almost to a man the people of the nation did not want to drive only fifty-five--for any reason, including gasoline conservation. Thus the trucker and non-trucker were united. Their common enemy was the "Smokey" or highway patrolman. Radio waves carried word of his presence up and down the length of the nation's highways. Almost overnight every driver needed a CB to maintain vigilance on the road.

By 1975 millions of drivers were equipped with the CBs, and each one was able for the first time to talk with numerous truck drivers. The trucker's jargon was quickly accepted and altered by the other

drivers. Soon the driver's world was over-run by the general public. Even if he--or she--is still set apart in the local truck stop, the driver is no longer a member of a special elite. The driver is now simply one of many on the look out for Smokey.

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