To the Graduate Council:

I am submitting herewith a dissertation written by Craig Allen Hollingshead entitled "Now Joining the North and South: A History of the Mason and Dixon Lines' Marketing and Operations Management, 1932-1982." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Business Administration.

Edwin P. Patton, Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Vice Provost
and Dean of The Graduate School

NOW JOINING THE NORTH AND SOUTH:
A HISTORY OF THE MASON AND DIXON LINES' MARKETING AND OPERATIONS MANAGEMENT, 1932--1982

A Dissertation

Presented for the

Doctor of Business Administration

Degree

The University of Tennessee, Knoxville

Craig Allen Hollingshead

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Writing a dissertation is meant to be a learning process. This objective has been fulfilled. I have learned a good deal about trucking in the course of researching this project. I have also learned much about the operation of computer based word processing systems in the process of producing a finished document.

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Finally, I must formally acknowledge the contribution and support received from my family. Now that the project is completed, we have some catching-up to do.

ABSTRACT

This is the corporate history of a motor truck common carrier, The Mason and Dixon Lines, Inc. It chronologically presents management milestones in the company's development; acquisitions, diversifications, changes in target markets, and corporate reorganizations. The focus is primarily on the firm's development in the areas of marketing and operations management. The objectives of this dissertation are to 1) report <u>what</u> events occurred: to document history, 2) relate <u>how</u> the firm acted and reacted to events: as a guide for present and future managers, and 3) seek an explanation as to <u>why</u> particular management actions were taken in order to put the first two elements into perspective.

This paper was based upon historical exploratory research conducted through review of secondary sources, company materials, and a series of twenty-five interviews with Mason Dixon employees, and industry observers.

Mason Dixon was established in 1932 for the purpose of providing motor transport of products from Upper East Tennessee to markets in New York. In the succeeding fifty years that single route had been expanded into an operation that offered service to all points in the continental United States. During that period the company passed numerous management milestones; significant among these are 1) a program to generate backhaul traffic in the early 1930s, 2) recruitment of the best management talent to supervise new activities, 3) E. Ward King's purchase of the total proprietorship

rights in 1939, 4) the post-World War II program of terminal construction and fleet modernization to serve as a basis for penetration of the New York-Atlanta freight market, and 5) efforts to increase operating revenues in the 1960s and 1970s through a program of territorial expansion.

This dissertation provides an historical perspective on the issues of regulation, competition, marketing, and operations management. To the extent that a truck line manager can recognize similarities between the reported past and his present circumstances, this dissertation may be employed to reduce uncertainty about the future and make a positive contribution to motor carrier management effectiveness.

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CHAPTER I

THE HISTORY OF A TRUCK LINE

1. INTRODUCTION

Roger Bloomfield was the St. Louis Regional Sales Manager for Gateway Transportation in 1976. In an address to the Des Moines, Iowa chapter of Delta Nu Alpha Transportation Fraternity he observed that motor transportation is a simple process. People pay a carrier to move things from one place to another. The objective for the truck operator is to haul freight that brings in maximum revenue. Then, run the operation in a manner that provides an adequate level of customer service at the same time controlling operating costs to produce a profit. "A relatively simple process," he said, "I don't see how we mess it up so bad and so often."[1]

Perhaps one of the reasons it gets "messed up" is that truck operators continue to make the same mistakes over and over. Or they fail to capitalize on the advances and opportunities as they become available. In many cases these errors could be prevented if truck line managers knew more of the history of their industry. A knowledge of trucking history could allow managers to benefit from the accumulated experience of others. This paper is to be the history of a truck line, The Mason and Dixon Lines, Inc., Kingsport, Tennessee. The history of the development of this company parallels

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[1]Comments by Roger Bloomfield, Des Moines, Iowa, January 22, 1976.

that of the modern motor carrier industry. The factors which contributed to the growth of American trucking were also instrumental in the prosperity of Mason Dixon.

Truck Operations in America

Motor truck transportation is an essential element of the American economy. Considering both local and long distance movements, "three of every four tons of freight move all or part way by truck . . . ."[2] "All communities depend to some degree on inter-city motor transportation and over one-half of the communities in the country depend exclusively on truck transportation to supply them with their needs."[3] Offering speed, flexibility, and overall superior service compared to other modes, motor transport has grown to a position of dominance in the American transportation industry. One measure of trucking's degree of importance is the revenue generated by motor carrier operations. The Transportation Association of America reported that in 1978, $147.4 billion, more than 77 percent of the national freight dollar, was paid for truck transportation.[4]

Not only does trucking play a vital role in moving America's commerce but the carrier components themselves are important contributors to the national economy. "The manufacture, servicing

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[2]William A. Bresnehan, "To: The Press . . . Editors, Writers, Researchers," (Washington, D.C.: American Trucking Associations, Inc., undated but probably 1975), unpaged.

[3]Donald V. Harper, Transportation in America, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978), p. 225.

[4]Truck Transportation Facts and Trends, (Washington, D.C.: Transportation Association of America, July 1979), p. 1.

and operation of motor vehicles, including use of the highways, account for about 17 percent of our Gross National Product, of which slightly more than 10 percent is accounted for by passenger transportation, ..."[5] Trucking, then, contributes about 7 percent of the GNP--a share second only to American agriculture.[6] The industry employs more than 9 million people in a national workforce of 98 million.[7]

The importance of motor transportation to the economy is impressive; trucking's rate of growth is equally impressive. At the turn of the Century, motor carriage was non-existent; by 1930 trucks had nearly eliminated horse drawn vehicles in local drayage and had captured 4 percent of the inter-city market from the railroads.[8] This position was enlarged and consolidated through the Depression and the Second World War. In the post-war period of economic prosperity, motor truck operations grew rapidly. The American Trucking Associations estimated that motor carriers surpassed railroads in revenue production by 1950[9] (see Table 1.1).

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[5]Charles A. Taff, Commercial Motor Transportation. 5th ed., (Cambridge, Maryland: Cornell Maritime Press, Inc., 1975), p. 2.

[6]"The Nation's Workhorse on Wheels," News Front, Fall 1979, unpaged.

[7]"Industry Employs 9 Million Persons Nationwide," The Lifeliner Magazine, Official Publication of the Iowa Motor Truck Association, May 1974, p. 11.

[8]Committee on Interstate and Foreign Commerce, Domestic Land and Water Transportation, (Washington, D.C.: U.S. Government Printing Office, 1951), p. 76.

[9]American Trucking Trends, 1966, (Washington, D.C.: American Trucking Associations, Inc., 1966), p. 9.

Table 1.1. Motor Inter-City Freight Market Shares

Year	Ton-Miles (1)	Revenue Share (2)	Revenue Share (3)
1940	10.0	17.7	
1945	10.0	16.4	
1950	16.3	30.0	
1955	17.5	36.2	
1960	21.8	43.4	59.7
1965	21.9	48.7	63.4
1970	21.3	53.2	67.2
1975	22.0	53.2	66.9

Source: (1) Transportation Facts and Trends, (Washington, D.C.: Transportation Association of America, 1978), p. 8. Includes both public and private carriage; (2) American Trucking Trends 1979-80, (Washington, D.C.: American Trucking Associations, Inc., 1980), p. 35. Includes only regulated carriers; (3) Transportation Facts and Trends, (Washington, D.C.: Transportation Association of America, 1978), p. 4. Includes both public and private carriage.

Large, regulated truck operations comprise only a small segment of the industry yet they generate a major portion of the revenue earned by motor carriers. Of the 26.2 million trucks in use in 1972 only about 1.1 million, or 4.2 percent, were operated on a for-hire basis. Of the for-hire vehicles, 378,800, or 34.4 percent, were owned and operated by common or contract carriers.[10] In 1978 there were 16,874 for-hire motor carrier firms regulated by the Interstate Commerce Commission, only 1,045 of these generated annual operating revenues in excess of $3 million. Yet these carriers comprise the largest revenue producing segment of the industry.[11] In 1978, the largest one hundred regulated motor carriers generated $12.96 billion, 35.4 percent of the revenues for the entire regulated segment of the industry.[12]

The typical for-hire motor carrier line began as a small operation; an individual proprietorship, a partnership, or perhaps

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[10]Department of Commerce, 1977 Census of Transportation, Vol. II. Trucking Inventory and Use Survey, (Washington, D.C.: U.S. Government Printing Office, 1980), pp. 3, 11-12.

[11]"Class I carriers are less than half as numerous as Class II carriers but generate approximately six times as much gross freight operating revenue. While there are approximately two-thirds as many general freight carriers as specialized carriers, the general carriers generate approximately twice as much gross freight operating revenue." Donald M. Hill and William D. Morice, Motor Carriers, An Industry Profile, (Washington, D.C.: Peat, Marwick, Mitchell & Co., 1979), p. 4.

[12]Transportation Association of America, Transportation Facts and Trends, (Washington, D.C.: July 1979), p. 2. and Carl Glines, "Top 100 Data Shows Trucking Industry Made Modest Gains in 1978," Commercial Car Journal, June 1979, pp. 150-153.

a closely held family corporation. It provided short haul cartage service to a limited geographic region and customer clientele. During the initial stage of development, the carrier operated only a few trucks; often only one. The majority of carriers did not progress much beyond this stage and the industry even today continues to be characterized by a large number of small firms. The 1977 Census of Transportation reported that 87.9 percent of all U.S. motor carriers had fleets of five or fewer vehicles.[13]

Truck lines that have grown have done so by increasing their penetration in existing markets and/or expanding their geographic area of service. A major portion of this paper will examine the market development strategies employed by Mason Dixon during its 50-year history.

The Mason and Dixon Lines

The Mason and Dixon Lines, Inc., Kingsport, Tennessee, a common motor carrier, celebrated its Golden Anniversary in 1982. Beginning operations as a three-way partnership with three trucks, the firm grew to become the twentieth largest American motor carrier in 1979.[14] Operating primarily on regular routes, it carried general commodities to and from most points east of the Mississippi River.

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[13] Department of Commerce, 1977 Census of Transportation, Vol. II, Trucking Inventory and Use Survey, (Washington, D.C.: U.S. Government Printing Office, 1980), pp. 3, 11-12.

[14] Carl Glines, "Top 100 Data Shows Trucking Industry Made Modest Gains in 1978," Commercial Car Journal, June 1979, pp. 150-53.

A subsidiary tank truck operation transported industrial chemicals nation-wide.

Mason Dixon was selected as the subject for this investigation because 1) the owners wanted a company history to commemorate the event of their fiftieth year in business. They were, therefore, agreeable to cooperate in the required research; 2) the firm has survived for a half-century--a significant accomplishment given the corporate mortality rate in the industry; 3) the firm is similar to many other motor carrier operations in its organization, mode of operation, management practices, and marketing programs; thus the lessons from Mason Dixon's experience may be generally applied.

2. PURPOSE OF THE STUDY

An understanding of history and application of its lessons are important tools to employ in the management of any enterprise. Analysis of past failures can prevent repetition of previous mistakes. A review of earlier successes may suggest solutions to contemporary problems. Knowledge of past actions may eliminate unnecessary duplication of previous effort. Being able to predict the future is an aid to any manager. Historical analysis shows that patterns of events repeat themselves. When strategic planners use historical patterns and trends to reduce uncertainties about the future they overcome the necessity of merely responding to changing conditions; they are able to influence their occurrance.

This study provides an historical perspective on many of the enduring conditions which face managers in the motor carrier industry. This is particularly relevant because, notes Bart Rawson, past President of the American Trucking Associations and trucking historian:

> It's a proven fact that there's virtually nothing new in trucking that is not an outgrowth or improvement of something that was done before . . . it makes good business sense to study how trucking was run in yesteryear. If you know what happened in the past . . . you have a great start on the future.[15]

History of Mason Dixon

An industrial case study is an account of an economic activity. It is a presentation of the facts and circumstances surrounding an organization's actions and reactions to events. The value to students and practitioners is to provide insight into past decisions and, to the extent that past is prologue, provide a basis for making decisions and an historical foundation for formation of future strategies that will achieve an enterprise's current objectives. This project is to be a case study of the historical development of a motor truck line. The objectives are 1) to report what events occurred: to document history, 2) to relate how the firm acted and reacted to events: as a guide for present and future managers, and 3) to seek an explanation as to why particular

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[15]Bart Rawson, "From the Turn of the Century," Distribution Worldwide, September 1976, p. 36.

management actions were taken in order to put the first two elements into perspective.

An important part of any historical study is to record <u>what</u> happened. In this paper a broad range of relevant exogenous factors; events in the governmental, economic, technological, and competitive environments, will be examined with particular emphasis given to their effects upon motor carriage. The purpose is to provide a perspective which enhances understanding of the conditions which surrounded Mason Dixon's major management decisions.

The unique feature of a corporate history is its presentation of <u>how</u> the particular firm reacted to external events. This study presents a review of the fundamental management actions taken in the fundamental areas of Operations and Marketing. These two were selected for particular emphasis because they represent activities which are critically important to the survival and success of all truck lines. The focus is on management milestones in Mason Dixon's development; acquisitions, diversifications, changes in target markets, and corporate reorganizations. The purpose of a close examination of detail is to determine the implications and effects of these major decisions.

A final aspect of this corporate history concerns <u>why</u> various actions were taken. By joining the exogenous and endogenous factors with corporate and personal objectives, resource constraints, and other considerations, it is possible to get a feeling for the rationale underlying major decisions. The purpose of this integration is to gain an appreciation for the conditions faced by corporate decision-makers and an insight into Mason Dixon's management process.

Contribution to the Literature

History consists of the collected recollections of participants and observers of events. The perception of these individuals, however, often is fragmented. People's recall may be distorted by personal conviction, self-interest, or subsequent events. By gathering and comparing a number of independent accounts--from participants and interested observers--it is possible to accomplish an accurate historical record. Then, once the facts are written down and preserved, they may be studied and analyzed to achieve understanding.

The essential value of this research is to allow preparation of a document which clarifies the history of the Mason and Dixon Lines, Inc., within the context of national events. That task has never been done by an impartial observer. It allows the reader to see problems facing company managers and recognize different potential solutions they considered. It also shows how these executives faced changing conditions and adjusted their marketing and operational strategies accordingly.

In a broader context the experiences and opportunities of Mason Dixon's executives are similar to those of others throughout the trucking industry. To the extent that any manager can recognize similarities between the reported past and his present circumstances, this dissertation may be employed to reduce uncertainty about the future and make a positive contribution to major carrier management effectiveness.

3. RESEARCH METHODOLOGY

The product of this exploratory investigation is a narrative case study. Primary research consisted of a series of twenty-five personal interviews with present and former employees of Mason Dixon, members of the King family and their personal associates, representatives of competing truck lines, and knowledgeable industry observers. Through cooperation of The Mason and Dixon Lines, Inc., other primary sources of information were also made available including corporate records, financial reports, and internal correspondence. These sources are quoted throughout the paper.

Secondary sources of information, mostly newspapers and magazines, were used to gather specific details of the firm's history, development of the motor carrier industry, and the changing regulatory, economic, and competitive environment in which each operated.

An additional secondary information source, trade association publications, provided insight relating to development of the trucking industry in America and the changing challenges facing the industry. Since these factors were critical to Mason Dixon's history they were necessary to the study.

4. LITERATURE SEARCH

Appropriate to its economic importance, there have been thousands of articles written about the trucking industry. Ranging from features in the Sunday supplements to the American Trucking Association's annual financial analysis to doctoral dissertations; these writings deal with the industry in general and seldom focus on a single truck operator. Authors of these materials give more emphasis to the present and future than to the past. Managers, seeking the guidance of historical precedent are frustrated by this perspective. However, with the large quantity of material written, a diligent researcher can find various sources which contain relevant information.

Mason Dixon Company Materials

Since this study primarily deals with Mason Dixon, materials relating particularly to that firm were especially valuable. The company published two brochures, Historical Highlights 1932-1967 and Mason Dixon Company History released in 1975. These documents are factual but provide little detail on the company's managerial process. Other corporate histories were prepared in 1950, 1957, 1963, and 1975 but were not released to the public. They, too, are factual but provide little insight into corporate strategy or objectives.

Corporate newspapers were the single most valuable written source of information concerning not only what events occurred but also why management actions were taken. In interviews, policy statements, and reported speeches the Kings and other corporate executives explained what they wanted Mason Dixon's employees to accomplish. Either by direct statement or by implication these articles provide much detail on the company's objectives and plans for accomplishing them. The corporate newsletters, Mason Dixon News, The Rolling Reporter, and Operation TurnAround Update, were intended for distribution to company employees and were available to the general public on a limited basis.

Other Company Histories

In his 1966 dissertation, Filgas observed, "Little in the way of written accounts of the history of a trucking company has been done."[16] Few motor carrier histories have been written since. The array of works dealing with the history of motor carriage and motor truck lines ranges from comprehensive, scholarly works to thinly disguised public relations efforts and vanity press profiles of the truck lines' founders. Filgas' dissertation and later book on the founding and development of Yellow Freight is the most thorough and objective effort. It provides a comprehensive treatment of the history of a truck line as a business enterprise and focuses on the strategic policies of a succession of owners. Written in the 1960s, however, this work omits the difficult decade of the 1970s and the adjustments in policy required by deregulation.

Broehl's history of Norwalk Truck Line, written in 1954, was the first scholarly effort to preserve the history of a truck

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[16] James F. Filgas, Management by Logic: A History of Yellow Transit Lines, Incorporated. Unpublished doctoral dissertation. (Bloomington, Indiana: Indiana University, 1966), p. ix.

line. It was thorough but focused as much on the personality of owner John Ernsthausen and his primary executives as on the motor carrier operation.

Cleo Crouch's autobiographical account of the growth of Crouch Bros. is an entertaining and informative effort. Motivated by vanity and written by an accomplished wordworker, it is a readable and accurate portrayal of the post-war environment in which Crouch built his business. Crouch's explanation of his growth strategy and changing marketing tactics are the high points of the book. Crouch Bros. was sold in 1974 and Cleo Crouch retired. It would be interesting to know how he would deal with the present industry environment.

Samuel Taylor's study of PIE is primarily about people, only incidentally about trucking.

These books comprise the best of the written accounts of truck lines. The remainder suffer in comparison. Several carriers have noted their fiftieth anniversary by publishing a corporate history. These works range from Smiths Transfer's four-page tabloid to Consolidated Freightway's sixty-page picture magazine. These show the common failure of corporate-sponsored works intended to be distributed to customers and stockholders. They focus more on the personality of the founder than on his work. They are interesting but not greatly informative concerning the manner in which the firms managed to survive for fifty years. A contemporary motor carrier manager would learn little from these that could improve his job performance.

Newspapers

Since Mason Dixon was a prominent local firm, the newspapers of the Tri-Cities of Tennessee carried frequent articles concerning the company and its personnel. Most information obviously came from company press releases although some investigative reporting is evident in articles concerning Mason Dixon's labor problems and legal suits. The Kingsport, Tennessee, Times-News published an excellent series of articles in September 1957, dedicated to recounting Mason Dixon's first twenty-five years of business. The series authors must have had full cooperation from the King family since the articles contain personal recollections of many company employees.

Newspapers in cities served by Mason Dixon usually carried stories concerning terminal openings, personnel changes, and similar events. These were obviously copied from press releases as there are many examples of two papers carrying virtually identical articles.

Taken all together, newspaper articles provide considerable factual information concerning major events in the carrier's corporate life but fail to look deeply at long-term corporate strategy or reveal the effect of the events they describe.

Trade Journals

Magazines furnish one of the best sources of current information concerning dynamic situations. They are targeted to a narrow market, published frequently enough to keep abreast of rapidly changing conditions, and the contributors are knowledgeable enough of their subject to provide an analytical appraisal of the events reported. While they abound with advertising and soft news, the quality of the regular features and special reports has improved substantially in the last decade.

Trade journals are the ideal source for motor carrier managers to obtain information concerning technological innovations, new marketing approaches, and operational improvements. Fleet Owner, Transport Topics, Commercial Car Journal, and Southern Motor Cargo regularly feature articles concerning economic trends, regulatory changes, and competitive conditions effecting motor transportation.

Mason Dixon has been the subject of several trade journal features. A 1937 Fleet Owner article dealt with Mason Dixon's newly-established safety program. The B-line, a publication of the Brown Trailer Manufacturing Company, ran a corporate profile of the truck line in 1959, and Goodyear's corporate publication carried a story about the Kings in 1955. Southern Motor Cargo featured the company and noted its Silver Anniversary in 1957. In 1964, Commercial Car Journal featured the company's innovative new maintenance facilities.

The American Trucking Associations (ATA), a motor carrier trade association, collects industry financial and operating data, performs statistical analysis, and publishes the results for the benefit of truck line managers, investors, and the general public. Various operations councils conduct research designed to improve the operating effectiveness of all aspects of the trucking industry.

The collected promotional material published by ATA provides a running commentary on the issues of concern to truck operators and the management actions suggested to resolve these problems. Trucking Trends and Financial Analysis of the Motor Carrier Industry, both annual publications, are invaluable resources for industry research.

News Magazines

Business periodicals such as Forbes, Fortune, Barrons, Dun's Review, and Business Week regularly publish information concerning the performance and prospects of trucking in America. These articles focus on the economic and business aspects of the motor carrier industry in general and provide occasional profiles of specific truck lines. Mason Dixon has occasionally been mentioned, but has not been the subject of an article. Readily available files of these magazines provide an excellent source of information on trucking's historical development over the past fifty years.

5. OUTLINE

Chapter I, A History of a Truck Line, serves as an introduction to the research project and subsequent dissertation. It explains the importance of motor transport to the American economy, the value of historical research, and the reasons that Mason Dixon was selected as the focus of this project. The chapter further surveys the types of written material currently available relating to motor carrier history, the resources used in conducting this particular research, and the objectives to be served by the completed dissertation. The remainder of the paper is a chronological presentation of the events which constitute the management milestones of Mason Dixon's corporate life.

Chapter II, The Formative Years: 1932-1939, sets the stage by examining the foundations of motor carriage in America and describes the conditions which led to establishment of the truck line that would become Mason Dixon. Although established in an unregulated environment, Mason Dixon was soon subject to the economic policies of the Interstate Commerce Commission (ICC). How that influenced managerial strategy is an important topic covered. The chapter concludes with a review of some of the personnel and personnel policies that made significant contribution to the company's survival of the Depression years.

Chapter III, The Period of Preparation: 1939-1957, concentrates on Mason Dixon's efforts to develop strength by penetrating the New York, Knoxville-Nashville, Atlanta market. The essential strategy after World War II was to build a strong operational base of fleet and terminal facilities in order to offer superior customer service. Establishment of this superior structure and subsequent market development was the focus of all the company's energies and resources during the post-war period.

Chapter IV, Corporate Growth is New Goal: 1958-1969, examines Mason Dixon's acquisitions of Silver Fleet, Volunteer, and Yankee Lines as part of an overall corporate marketing strategy of territorial growth. The company's prime operational strategy, controlling costs, is shown in the continued terminal construction and fleet modernization programs, claims reduction efforts,and initiation of the MADIX computer-based management information system.

Chapter V, Gains are Consolidated: 1970-1982, is concerned with how the company's marketing and operations strategies were forced to adapt to changes in the national economy and regulatory structure. Corporate growth is still a goal but its direction has changed. As the period closes, Mason Dixon is facing an environment much like E. Ward King encountered fifty years earlier; economic recession, lack of governmental regulation, and intense competition.

Chapter VI, Summary and Conclusions, provides a synopsis of the historical events in Mason Dixon's first fifty years. It offers conclusions relating to the reasons for the company's initial success and later decline in operational effectiveness.

6. SUMMARY

E. Ward King would have found this historical account useful. In a 1960 speech he said:

> I believe in the future for I remember the past. We are faced with the same problems that were faced in 1932, 1942, and 1952. We will always have to cope with similar problems.[17]

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[17] E. Ward King speech to 1960 General Meeting, The Cloister, Sea Island, Georgia. Reported in <u>The Rolling Reporter</u>, January 1960, p. 1.

This dissertation is intended to help today's decision-makers by providing an historical basis for analysis of contemporary problems.

CHAPTER II

THE FORMATIVE YEARS: 1932--1939

1. INTRODUCTION

Most trucking companies begin as small scale operations, often with a single truck. If they are well managed they may survive and provide a living wage to their owner. If they are very well managed and fortunate they may eventually grow large enough to attain regional or even national market coverage.

In 1929, a small trucking company in Charlotte, North Carolina, failed. Herman D. (Buddy) Horton, owner of a tire and battery shop, was the major creditor and was, therefore, named receiver. He paid off the debts and operated the company as Horton Motor Lines. In 1942, Horton merged with six other East-South carriers to create Associated Transport, at one time the largest truck line in the United States.[1]

In 1930, Russell and Raymond Smith converted their Mitchell touring car into a truck, and Smith's Transfer of Staunton, Virginia, was born. They survived the Depression by hauling sugar, fertilizer, or anything else that could be transported.[2]

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[1] Peter A. Revelt, "Skiens of Shoestrings . . . ," Ward's AutoWorld, date missing but probably 1966 or 1967, p. 59.

[2] Peter A. Revelt, "Skiens of Shoestrings . . . ," Ward's AutoWorld, date missing but probably 1966 or 1967, p. 59.

C. Grier Beam founded Beam Trucking in 1931. For five years the firm consisted of five truck operators hauling citrus from Florida to the area around Beam's hometown of Cherryville, North Carolina. In 1936, Beam took over ownership and renamed the firm Carolina Freight Carriers.[3] In 1981, Carolina was the sixteenth largest motor carrier in America.[4]

In 1932, three men from East Tennessee--E. Ward King, Tyson Steele, and Roy B. Moore--started hauling general commodities from Kingsport and Knoxville, Tennessee, to New York City. From this beginning, The Mason and Dixon Lines, Inc., grew to span the continent by the year of its Golden Anniversary.

Malcolm McLean founded McLean Trucking Company in 1934. The firm's 1979 Annual Report stated:

> In its earliest days, McLean operated "in a straight line" between a number of points in North Carolina and a limited area in the Northeast and southern New England. There was no great dream in those days. The most pressing need was to shore up the authority it was already operating. . . . If there was a dream, it was to build the company into a strong, viable motor carrier.[5]

These five cases are examples of truck lines that became exceptionally successful when other operations were only marginal

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[3]Peter A. Revelt, "Skiens of Shoestrings . . . ," Ward's AutoWorld, date missing but probably 1966 or 1967, p. 59.

[4]"1981's Top 100," Reprinted from Chilton's Commercial Car Journal, June 1982, page number missing.

[5]McLean Trucking Company, Annual Report, 1979, (Winston-Salem, North Carolina: McLean Trucking Company, 1979), p. 3.

or failed entirely. The objective of this paper is to record the historical development of one of these successful firms, The Mason and Dixon Lines. In order to better understand the success of this company and its history, the early years of the American motor carrier industry need to be examined briefly.

2. DEVELOPMENT OF MOTOR TRUCKING IN AMERICA

The history of American trucking begins about the turn of the twentieth century. After an extensive expansion period during the last quarter of the nineteenth century, American railroads were experiencing their Golden Age and dominated the national transportation system.

While railroads monopolized the long-distance, large-volume traffic, local drayage was accomplished with horse and wagon. In spite of general use and centuries of precedent, the horse was an inferior means of commercial transport. As railroad mechanization replaced horsepower in the long-haul market, the combination of speed, power concentration, and reduced housekeeping afforded by the internal combustion engine began the process of replacing the horse in short-haul applications. George Grupp, author of an early text on motor transport, noted:

> At the very beginning, motor vehicles were looked upon as luxuries to be used only by those who could afford such things. They were naturally very costly to operate in those early days, and this excessive cost had a deterrent effect on both their manufacture and their use for commercial purposes. Those who did first use them for commercial

purposes, had advertising effect in mind, not economy.[6]

Prior to World War I, transportation of freight by motor vehicle was limited by the primitive level of vehicle technology and by the scarcity of hard surfaced, all-weather roads.[7] Adequate right-of-way was found almost exclusively within metropolitan areas. About 1900, major wholesalers and retailers with urban delivery requirements began to make extensive use of motor trucks.[8] World War I influenced the development of the trucking industry in two ways: 1) it created substantial traffic increases which the railroads were not able to service and, 2) it encouraged shippers to seek transport alternatives. They found motor carriage to be an adequate substitute.

In spite of the near-monopoly status enjoyed by American railroads during the last part of the nineteenth century, most roads were in serious trouble by 1918. Decades of exploitative labor practices had produced a militant work force whose demands were becoming insistent, resulting in strikes and general unrest that disrupted rail service. In addition, economic regulatory programs administered by the Interstate Commerce Commission (ICC) were having a significant impact upon rail operations. Rail rate controls caused rate increases

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[6]George W. Grupp, Economics of Motor Transportation, (New York, New York: Appleton & Company, 1924), pp. 370-71.

[7]Charles A. Taff, Operating Rights of Motor Carriers, (Homewood, Illinois: Richard D. Irwin, Inc., 1953), p. 1.

[8]Association of American Railroads, Highway Motor Transportation, (Washington, D.C.: 1945), p. 75.

to lag behind inflation, restricting profits and capital available for modernization. The tremendous increase in demand for transportation of war materials exceeded the railroad's capacity to perform the service. Traffic became snarled, and it appeared that the national security was in jeopardy. When railroads were unable to improve service, they were nationalized on January 1, 1918.[9]

One of the first actions of the newly created Federal Railroad Commission was to establish a system of priorities and embargoes designed to ensure that adequate rail transport facilities were available to move material necessary for the war effort and the national economy. Non-essential industries and certain geographic areas were denied rail service. Therefore, it was imperative that the embargoed industries find alternative means of transport. In spite of slower transit times and higher costs, motor transportation service had the advantage of being available. If the initial attempts were a little reluctant and tentative, the shipper's caution would be understandable.

The experiment worked remarkably well; so well, in fact, that the level of demand increased and the circle of service expanded. In turn, this created a demand for vehicle manufacturers to produce and offer trucks in larger numbers and with higher levels of technology. Revenues, increasing from freight operations, paid for

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[9]D. Philip Locklin, Economics of Transportation, Seventh Edition, (Homewood, Illinois: Richard D. Irwin, Inc., 1972), p. 238.

these new vehicles. Another result of this experiment was a renewed demand for better roads.

World War I accelerated the development of motor transport in America. It affected the trucks themselves, the roads on which they operated, and the traffic tendered for transport. Each of these influences was permanent and established a trend which continued after hostilities ceased. By 1920, the number of trucks registered in America had reached one million and the number of vehicles in for-hire service was estimated to be 150,000.[10] During the decade of economic prosperity which followed the end of the war, motor freight continued to expand. By 1930, it was estimated that 4 percent of the inter-city ton-miles of commodity traffic was transported by motor trucks and that vertually all local drayage was accomplished by motor vehicles.[11]

The decade of the 1930s witnessed the most severe economic depression suffered by the world in modern times. The record of industrial stagnation and personal hardship is familiar to all students of business and history. The Great Depression left a

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[10] House Document Number 354, Federal Regulation of the Sizes and Weights of Motor Vehicles, 77th Congress, 1st Session, 1943, p. 91 as reported in Highway Motor Transportation, (Washington, D.C.: Association of American Railroads, 1945), p. 90.

[11] Committee on Interstate and Foreign Commerce, Domestic Land and Water Transportation, 82nd Congress, 1st Session, Senate Report Number 1039, (Washington, D.C.: U.S. Government Printing Office, 1951), p. 76. Reported in Donald V. Harper, Economic Regulation of of The Motor Truck Industry by the States, unpublished doctoral dissertation, (Urbana, Illinois: University of Illinois, 1957), p. 4.

legacy that continued for beyond the 1930s in its influence upon the attitudes and actions of motor truckers. Wayne Broehl, Jr. and Neil Curry, two firsthand observers, commented on the Depression's effects:

> it could be said that the Great Depression made the trucking industry. Industrial production dropped rapidly after 1929 and unemployment mounted. The economy of the country was in critical shape. But there was still the necessity for production and for wholesale and retail sale. True, prices were down and the trend of ever increasing volume of the Golden Twenties was reversed. But even a country flat on its back must eat and must do some amount of replacement of goods, and in each case this food or goods must still be brought to the customer. Transportation in this sense is always necessary. The events of the early 1930s molded this transportation into a new internal make-up that was to exert fundamental change on the previous pattern.[12]
>
> Small merchants, unable to buy in large railroad carlot quantities found that they could keep their doors open and their stock nearly complete with small daily shipments supplied by truck--all that their limited budgets and curtailed sales could justify. Merchants and manufacturers found that they could eliminate huge storage facilities by incorporating trucks into their supply and distribution methods and could diversify their stock by purchasing in small lots.[13]

Economic conditions of the Depression forced manufacturers and retailers to reduce costs wherever possible. Inventories were kept at low levels to minimize maintenance costs; therefore, both raw materials and finished goods were stored in smaller quantities and ordered on a more frequent basis. This is precisely the type of traffic best suited for motor transport. For small lot shipments

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[12]Wayne G. Broehl, Jr., Trucks . . . Trouble . . . and Triumph--The Norwalk Truck Line Company, (New York, New York: Prentice-Hall, Inc., 1954), p. 38.

[13]Neil J. Curry, The American Motor Transport Industry, (Cambridge, Massachusetts: Bellman Publishing Co., 1956), p. 6.

and higher levels of customer service the flexibility afforded by door-to-door truck service created considerable market potential for truckers throughout the 1930s.

While demand for motor truck service increased during the Depression, there was an even greater increase in the number of suppliers of the service. During the early 1930s unemployment reached critically high levels.[14] As an alternative to unemployment "men from all walks of life, desperate for a livelihood, turned to trucking as a means of survival."[15] Economic barriers to entry were low; anyone with a few hundred dollars and good credit could get a loan to buy a truck. Because manufacturers were anxious to sell vehicles, credit terms were liberal. Technological barriers to entry were also low. Compared to the hundreds of highly trained personnel required to operate and maintain a rail system, the skills necessary to provide motor transportation over a system of publicly provided roads were minimal.

Regulatory barriers to entry were nearly nonexistent. Prior to passage of the Motor Carrier Act of 1935, the only regulatory programs in existence were administered by the states and consisted mainly of a requirement to obtain an operating permit. Usually these permits were issued upon application and payment of a nominal

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[14]Robert J. Gordon, Microeconomics, (Boston, Massachusetts: Little, Brown and Company, 1978), p. xvi shows 1932 unemployment to be 25.2 percent of the workforce.

[15]Bart Rawson, "From the Turn of the Century," Distribution Worldwide, September 1976, p. 36.

fee. The combination of these factors of ease of entry and an increased demand for small lot shipments resulted in the establishment of many new motor carrier firms. Typically they were small, operating only a few trucks, often only one, and were established by individuals with little or no transportation experience, or any other kind of business experience.

The large numbers of carriers entering the market created fiercely competitive conditions. With no stabilizing economic regulations, rates were depressed to levels approaching out-of-pocket costs. If entry was easy, then exit was even easier. Inadequate financing, lack of business experience, competition from railroads, express companies, and other motor carriers, in addition to the unstable national economy meant that most firms were continually operating on the edge of insolvency. If the operator could make enough money to buy gasoline, make his monthly payments, and still allow his family to eat regularly, he was doing well. In those difficult times, success was equated with survival, and survival was always precarious. The first accident or claim for loss or damage of cargo, or major repair bill would upset the balance, and the carrier would fail. The finance company would repossess the truck and begin to look for someone else with a few hundred dollars and good credit that wanted to start a trucking business.

3. MASON DIXON FOUNDED TO MEET THE NEEDS OF A REGIONAL MARKET

The growth of Southern industry in general and in Upper East Tennessee in particular had progressed rapidly in the economically prosperous 1920s. Northern firms migrated to the South, attracted not only by the mild climate, but also by the abundant, non-union labor supply and readily available natural resources. Energy intensive industries could utilize local coal deposits and, later, cheap electrical energy from Tennessee Valley Authority power plants.

Kingsport, Tennessee, is an excellent example of the importance of adequate transportation service to the economic development of a community. Kingsport had been a thriving agricultural and manufacturing center during the mid-1800s. Bypassed by both rail and water transportation facilities, it had faded into relative obscurity and economic inactivity by the end of the nineteenth century. However, completion of the Clinchfield Railroad in 1910 gave the community a new lease on economic life.[16]

Fred B. Johnson, the "Father of Kingsport," was retained by the Clinchfield to cooperate with other community groups in their efforts to induce Northern industry to relocate to Kignsport.[17] These efforts met with considerable success. Two building

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[16] "Clinchfield Railroad Has Played Vital Role in City Development," Kingsport, Tennessee, Times-News, 25th Anniversary Edition, September 25, 1949, page number unknown.

[17] H. Jefferson Shivell in interview with the author, Kingsport, Tennessee, April 14, 1981.

materials firms, Penn-Dixie Cement Corporation and General Shale Products Company, established Kingsport plants prior to the First World War. After the war, Tennessee Eastman Company built a plant near Kingsport that by 1959 was the largest industrial complex in the state. Kingsport Press, established in 1922, grew to become the largest book manufacturing factory in the world. Borden Mills, Inc. moved to Kingsport in 1924 and became one of the largest cloth manufacturing facilities in the South, and during World War II, Holston Ordinance Works was the largest explosives manufacturing plant in the world. In addition, two glass plants, a tannery and a leather products manufacturer were established in the area prior to 1930.[18]

However, lack of adequate transportation was one of the limited factors of Kingsport's development prior to 1910. The only railroad serving the community, the Clinchfield, was a short line coal hauler. All commodity traffic had to be interchanged, a time consuming process, or hauled by road for twenty miles to the nearest Southern Railway depot. In either case, transport service was slow.

The truck line that was to become Mason Dixon was founded for the purpose of providing rapid motor transportation for shippers in Upper East Tennessee to reach markets in New York. In spite of the traffic potential, the venture was a gamble. Just like thousands

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[18] Andrew Wolfe, "A Dream Job by City Planners," Kingsport, Tennessee, Times-News, April 10, 1951, p. 6.

of similar operations across the nation, the line was underfinanced, had no terminals, no reputation, and little managerial experience in motor transportation. E. Ward King, one of the founders, later noted:

> This city [Kingsport], along with many others in East Tennessee, has already indicated great trends toward becoming an industrial center. Transportation facilities are relatively limited and only one small railroad has expanded its line through Kingsport. Now industry, to find its way into the South, must have available besides abundant power, raw materials and an adequate labor supply, a completely efficient, flexible and fast transportation service in order to compete in the great market areas of the nation. What could be better than for us to establish an agency to supply that service?[19]

On another occasion, King observed:

> In starting into the trucking business I had observed at least two other companies hauling from this section of the country to New York City. They had gone broke, although they had plenty of freight to haul from the South, so I was determined to get return loads in order that we could stay in business. The first load that we received came from Bush Terminals, Brooklyn, going to Memphis. We hauled it to Knoxville and could not get a connecting line to carry it to Memphis. We were finally forced to ship it by rail, paying them more for hauling the shipment from Knoxville to Memphis than we got for hauling it from New York City to Knoxville. "A bitter pill," but a most valuable lesson.[20]

As initially conceived, Mason Dixon consisted of a three-way partnership among Roy B. Moore, E. Ward King, and Tyson Steele. Roy Moore had been a freight agent for the East Tennessee and

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[19] "History of the Mason Dixon Lines, Inc.," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1957), p. 1.

[20] E. Ward King, "Founder Recalls First New York Trip," Kingsport, Tennessee, Times-News, September 20, 1957, p. 1.

Western North Carolina (ET&WNC) motor carrier operation in Johnson City, Tennessee. E. Ward King had, until recently, operated a Studebaker dealership in Kingsport, and Tyson Steele was running a single truck transportation service from Knoxville, Tennessee, to Middlesboro, Calhoun, Venamen, Wench, and Harlan, Kentucky. Terms of the partnership agreement were that each partner would furnish a tractor and trailer to be operated as part of the company. Moore and Steele drove their own trucks, but King had his vehicle operated by his younger brother, Stewart T. King. This arrangement allowed King to concentrate on sales and administration for the entire partnership.

Many people contributed to the successful development of Mason Dixon but none so much as E. Ward King. It would be helpful to consider something of the man's own origins and development to better understand his attitudes and actions. Born near Kingsport, Tennessee, in 1898, E. Ward King was the son of a Methodist minister. His family moved regularly when he was a child; he finished his formal education at Wytheville, Virginia. After a year or so of working as a mechanic at the Willis Overland factory in Toledo, Ohio, he was inducted into the Army during World War I. In 1918 he was a Motor Maintenance Sergeant with the 414th Motor Supply Train which was engaged in hauling ammunition and supplies to the French Front.[21]

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[21]Stan Dean, "Kings of the Wheeled Frontier," <u>Business on Wheels</u>, (Akron, Ohio: Goodyear Tire and Rubber Company, Inc., undated article reprint, probably 1955), p. 19.

An event occurred during this time which illustrates two of the personality characteristics that served King so well in later ventures: his imagination and organizational ability. Early one winter morning, he overtook a French Army convoy along the road to the front just as it was coming out of an overnight camp. Due to the extreme cold and the poor quality of fuel in use at the time, the French soldiers were unable to get their engines started. Through an interpreter, Sgt. King offered his assistance to the convoy commander. He quickly determined the problem and developed a solution. Perched upon the fender of one of the trucks, King urinated on the carburator body and intake manifold while a French soldier spun the motor's crank. King's body heat was just enough to vaporize the gasoline in the carburator, and the truck sputtered to life. The French officer was amused by the method and highly impressed with the results. Soon King had all the Frenchmen lined up to take a turn at carburator warming then doing duty on the cranking detail.

After the war, King returned to Virginia where he worked in various auto repair shops. In 1925, he and his younger brother, Stewart T. ("Tootie"), opened a Studebaker auto and truck dealership in Kingsport, Tennessee. Stewart was the automobile salesman while Ward handled the business details in the venture. The dealership continued until economic pressures of the Depression forced them out of business in 1932. Shortly after the Studebaker dealership closed, Ward King was offered half interest in a new truck line, Abbott and

Moore.[22] King was to furnish his labor and skill; Abbott and Moore were to supply the capital. However, no trucks were ever purchased, and with no operating revenues, King was without income. He asked to be placed on salary with no success. He then tried to buy Abbott and Moore's intrastate operating authority from Chattanooga to the Tri-Cities--still no success. Finally he attempted to buy the entire operation and again was turned down. At that point, as King later told the story, he went to the owners and said, "Since you were so nice and gave me half interest in this business, I will be just as nice and give you your half interest back.[23]

With this experience behind him, King was approached by Tyson Steele and Roy B. Moore with a plan to start a new truck operation. Moore and Steele had a certain amount of operational experience, but they needed a partner with practical business knowledge and they felt King was such a man.

It is recalled that Ward King was a man of immense optimism.[24] When King became enthusiastic about a project, he would learn as much as possible about the subject before taking action. So it was with Moore and Steele's truck line. King saw the opportunity in providing motor transport service from the industrializing South to established commercial centers in the East. Later he remembered:

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[22]This was not Roy B. Moore.

[23]E. Ward King's speech to the 1960 General Meeting, Sea Island, Georgia, reported in The Rolling Reporter, January 1960, p. 1.

[24]Margaret (King) Norris in interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

> You had to look beyond the existing situation. You had to have faith--faith in the future . . . a deep belief in the idea that the basic need was for a fast, efficient and economical method of linking the two regions. Above all, you had to believe in trucking's ability to serve as that link.[25]

In addition to his business managerial ability, the other contribution that E. Ward King made to the survival of the fledgling motor line was his recognition of the critical importance of creating balanced traffic flows. Initially attention to this detail was the key to survival; later it was an essential element in assuring corporate success. Standard operating procedure for the company in those early months was "get a load of freight, get it to the destination, collect the money and find a load going in the opposite direction."[26] The partners agreed that it was better to wait a few days to find a backhaul load than to run empty.[27]

King spent November and December 1932, in New York City soliciting Southbound traffic. His primary success was in obtaining the S. H. Kress Company account. In an interview King told:

> of becoming a floor walker in sky-scrapers. I actually went around looking at names on doors in these buildings to line up potential customers. There were several times when the house man became suspicious of me.
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> One day I was able to see Mr. Nelson, Traffic Manager of S. H. Kress Company. [At that time Kress operated a string of dime stores and had been using rail service to supply

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[25]Stan Dean, "Kings of the Wheeled Frontier," Business on Wheels, (Akron, Ohio: Goodyear Tire and Rubber Company, Inc., undated article reprint, probably 1955), p. 19.

[26]"Company Founded With Belief in South's Industrial Future," Kingsport, Tennessee, Times-News, September 20, 1957, p. 2.

[27]Margaret (King) Norris in interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

their regional distribution warehouses in Atlanta, Georgia, and Chattanooga, Tennessee.] Upon meeting Mr. Nelson, the Traffic Manager asked, "What is your rate?"

I replied, "What is yours?"

We successfully lined up service to twenty-nine Kress stores . . . . Soon the new company had more Southbound tonnage than could be handled.[28]

Tyson Steele recalled those times in a 1981 interview:

E. W. got the Kress business to come back with. We would have perished if he hadn't . . . that was the only place we got any [cash] money. When we were running just three trucks they would give us enough business to always have a load back . . . . We didn't move our freight every day because we didn't have enough trucks. But people didn't mind that because they still got [their shipments] there quicker than by rail, anyway. They would hold up loads waiting for us to pick it up. They wanted to do that. Then, that was the only place we got any money when we delivered; they always paid in cash. Tennessee Eastman and the others, we had to bill them.

. . . .

We would haul Kress loads to Chattanooga. We delivered right out of the back of the truck since we didn't have a terminal there yet. Then we would haul empty back to Knoxville and start putting together another Northbound run. It wasn't too long before we started carrying yarn up North for TEC. That has been the backgone of Mason Dixon ever since.[29]

Tennessee Eastman Corporation, known locally as TEC, is a division of Eastman Kodak and operates one of the largest chemical plants in the South. Started in Kingsport in 1920 as a wood alcohol production facility, it grew to be a major supplier of fiber to the textile industry. Rayon acetate, a wood by-product, was made into

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[28]"Founder Tells of Early Days of the Company," The Rolling Reporter, January 1960, p. 1.

[29]Tyson Steele in interview with the author, Knoxville, Tennessee, March 24, 1981.

yarn at Kingsport then shipped to small knitting mills in Western Pennsylvania. Emory Flemming drove the route many times:

> I think we handled rayon into every silk mill there was in Pennsylvania. We called it hauling "up the river." We charged the rail rate which was pretty good money. We could give so much better service than the railroads. You get these little mills up in the hills in Pennsylvania and you just can't get good rail service to them.
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> Of course, on this end rail service isn't all that good either. You have to give it to the Clinchfield, but they are a coal hauler; they don't go anywhere. The Clinchfield gives it to the Southern in Johnson City, who has to give it to someone else to get it to Pennsylvania. All that switching takes days and days. Even back in the very beginning we could get from Kingsport to New York City in thirty-six hours.[30]

One of the early problems associated with generating backhaul traffic was the time required to accumulate a full truck load if the traffic being carried consisted of many small shipments. This consolidation period could take several days--a time in which the carrier's equipment was idle and not generating revenue. Company-owned terminal operations of commissioned agents would accumulate a load and have it ready to dispatch as soon as the truck could be serviced. Addition of these local agents into the existing line haul operation reduced turn-around time and could make the difference between profit and loss for the truck operator. While King and his partners could use the King home in Kingsport as a freight consolidation point, terminal operations at Northern locations were needed to accumulate back-haul loads.

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[30]Emory Flemming in interview with the author, Kingsport, Tennessee, December 23, 1980.

The New York end of the business was just as important as the Southern area. In the last month of 1932 the company utilized a New York commissioned agent, Motor Way.[31] Under this arrangement, the local agent provided all local drayage and a terminal location for consolidating traffic and truck loading and unloading. Depending upon the terms of a particular agreement, a commission agent might solicit traffic on the carrier's behalf and/or enter into interline agreements with other carriers. A commission agent is usually employed at locations where 1) there is not enough business to justify establishing and staffing a company operated terminal or 2) when a carrier is not financially strong enough to establish terminal operations.

Moore and Steele, the operations directors of the partnership, journeyed to New York in January and February 1933 in search of a suitable facility to establish a company terminal. When they found a location, Stewart T. King graduated from his position behind the wheel and was dispatched in early 1933 to become the New York Terminal Manager. He remained in New York City until 1934 when he returned to Kingsport as General Freight Agent.

While the Northern end of the route structure was being strengthened, activities were taking place in Tennessee to expand

[31]"Brief Resume of the History of the M & D Lines, Inc., Terminal Operations," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated, but probably 1950), p. 1.

that area of operation. The Kingsport terminal activities were moved out of Ward King's family residence and located in a small building on Clay Street which had formerly housed H. J. Shivell's Slip-Not Belting Company.[32]

Another terminal was established at the Knoxville Motor Freight facility located at Depot and Randolph Streets. Like the company terminal in New York, this was not used exclusively by the partners. Such terminals were jointly used by several small carriers who rented dock and office space.[33]

The original movements for the Kress account had been from New York City to Kress' regional distribution warehouse in Chattanooga. A terminal was established in Chattanooga in 1933 to handle the Kress traffic and develop other local business. It soon became clear, however, that the real traffic potential for Kress and many others was from New York to Atlanta. Atlanta was a thriving industrial and commercial city and has always been the undisputed Southern trade center. Business for the partnership developed with such speed that a terminal was established in Atlanta in January 1934. At this point, the outline of the original route structure was established: New York to Atlanta via Kingsport, Knoxville and Chattanooga, Tennessee.

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[32]H. Jefferson Shivell in interview with the author, Kingsport, Tennessee, April 14, 1981.

[33]It was often the case that carriers who shared such facilities would interline freight due to the convenience of the interchange. Later, these interchange agreements might lead to joining of the two firms when the industry went through periods of consolidation.

By early 1935, the level of demand exceeded the freight hauling capacity of the original three trucks and additional units were required. However, the original trucks were heavily mortgaged, making it difficult to obtain credit to purchase additional vehicles. Credit has been, and continues to be, one of the most persistent and troublesome obstacles to long run viability found throughout the trucking industry. The problem was partially resolved by the partners when they hired vehicles to operate under contract, much the same as contemporary owner-operators drive under contract for major truck lines.

This traffic expansion necessitated administrative changes within the company. Initially, the operation had been a partnership with each partner responsible for his own operating expenses and the sole beneficiary of whatever revenue was generated by his equipment. This "hip pocket" accounting system was forced to give way to a unified approach in which all revenues and expenses were pooled and the surplus divided equally.

Moore and Steele, being operationally oriented, devoted much of their effort toward driving their trucks. In this respect, Ward King deviated from the standard pattern of the early motor carrier operator as he seldom if ever drove a truck.[34] He felt that his greatest contribution to the firm was as a salesman and administrator. It must be understood, however, that in the early days, the three

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[34]E. William King in interview with the author, Kingsport, Tennessee, August 11, 1980.

partners did whatever needed to be done: solicit business, load freight, repair and service trucks in the garage behind King's house, and keep books on King's dining room table.

> All of us when we first started wasn't [sic] below stopping and going in and talking to somebody [to see] if they had any business that we thought we could get. But we had freight on the truck to take care of and we couldn't be fooling around or riding around to sign up customers.[35]

As the business developed, vehicle maintenance activity was transferred to a rented building on Clay Street and a full time maintenance man, Ford Supy, was hired. Supy had been a mechanic employed by the King Studebaker dealership and, as Mason Dixon's first head of maintenance, he grew up with the company, gaining industry-wide recognition for his views and practices regarding fleet maintenance and operations safety.

In the pre-war years, the company's maintenance standards were set high to ensure vehicle reliability. The partners felt that reliable vehicles were essential to high customer service standards and it was service that sold motor transportation. It was King's personal experience as a mechanic that provided the basis for the pre-departure and arrival inspections conducted on all vehicles and an overall preventative maintenance program. As opposed to the practice of "run-them-until-they-quit," a high level of maintenance paid dividends in the long run, according to Mason Dixon's early experience.

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[35] Tyson Steele in interview with the author, Knoxville, Tennessee, March 24, 1981.

In January 1934, the fledgling carrier had survived its first year of operation and passed a critical management milestone. It had managed to avoid foundering during the initial stages of operation where there were no established procedures to guide day-to-day activities and each problem had to be resolved by a first-time decision. It also had managed to expand the scale and scope of operations without exceeding the partner's capability to finance and manage the additional activities. At that time, Jack Buhl recalled, the Mason Dixon fleet consisted of six tractor/trailer units--he drove one of them--and one pickup truck.[36]

Operations usually ran well enough, but there were occasional problems. Ward King told of the

> near crisis which concerned my brother, "Tootie," who was pilot of my truck. By some means or other he and his co-pilot lost the spare tire and blew out another. They wired me for money for a new tire. Of course, I had no credit in West Virginia and virtually none in Tennessee. It took me about 12 hours to raise the $54, the tremendous price of the tire at that time.[37]

One problem that could not be disposed of so easily was the breaking up of the partnership; Tyson Steele had decided to sell his share of the operation. There is disagreement today regarding the exact conditions surrounding Steele's departure. In a 1981 interview Steele suggested that he had been forced out by a King-Moore conspiracy:

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[36] "Recall Experiences During Past Years," The Rolling Reporter, September 1957, p. 5.

[37] "Founder Tells of Early Days of the Company," The Rolling Reporter, January 1960, p. 1.

I didn't appreciate it at the time but that was business.
. . . .
He [King] was just a sharper businessman than we were--that's the whole thing in a nutshell. . . . If I had any idea that Mason Dixon was going to turn out like it did he couldn't have got rid of me under no [sic] circumstances.
Roy [Moore] got out of Mason Dixon for the same reason that I did; he got pressured out of it. He got a whole lot more money out of it than I did because he stayed 'till it was worth more.[38]

Under the original partnership agreement, Steele's share first had to be offered to the remaining partners. King and Moore raised the necessary amount and the partnership continued, now with two members. Steele remained with the company for another dozen years as a contract operator hauling cargo and as a Terminal Manager in Morristown, Tennessee; Baltimore, Maryland; Philadelphia, Pennsylvania; Newark, New Jersey; and Chattanooga, Tennessee. He later worked for Roy Moore when the latter was operating Danny Hite Motor Lines. If Steele had been convinced at the time that he had been treated unfairly, it seems unlikely that he would have maintained his business contacts with Moore and King.

Following Steele's departure from the partnership, Moore and King incorporated their business. On January 10, 1934, E. Ward King became President and Roy B. Moore was named Secretary-Treasurer. The matter of corporate responsibility was largely a matter of "pick your own title"; the two owners began to specialize their activities, based upon their individual interests, abilities, and experience.

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[38]Tyson Steele in interview with the author, Knoxville, Tennessee, March 24, 1981.

King concentrated on sales, administration, and finance while Moore took over the operations end of the business.

Every business needs a name. Usually the owners want an original and imaginative name, especially one that their customers identify and remember readily. King and Moore were no different as they sought to find a suitable title for their new corporation. They briefly operated as King and Moore, but they desired something with more style.[39] Company legend has it that the answer was provided by Kings's mother. She had grown up in the Reconstruction Era South and was familiar with the surveyed Mason-Dixon Line which had separated the North and South during the War Between the States. If that line had divided the North and South, she reasoned, why not a new line which would link them together in commerce? Thus, the name The Mason and Dixon Lines, Incorporated, and the slogan, "Now Joining the North and South." A commercial artist from a Knoxville advertising agency added the logo, a depiction of Generals Grant and Lee joining hands at Appomattox. This stylized version is actually an adaptation of an original art work which hangs in the Brooklyn Museum of Art.

4. EARLY MARKET DEVELOPMENT

The new corporation, with four terminals, was generating enough business by mid-1934 to warrent re-organization. Stewart T.

[39]Martin Long remembers seeing some old letterhead stationery for King and Moore. Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

King was promoted to General Freight Agent with responsibilities to "coordinate and standardize policies and procedures at the terminals and branch operations."[40] He also supervised the small force of company salesmen.[41] As General Freight Agent, King traveled 60,000 to 70,000 miles a year over the Mason Dixon system, accompanied by his wife who served as his secretary.[42]

One innovation in 1934 which greatly eased Stewart King's terminal management problems was the establishment of a teletype communications network among all operating locations. The purposes of this system were 1) to help balance traffic, 2) to facilitate tracing and expediting shipments, and 3) to allow intra-company message traffic. It was the first in a series of adaptations of electronics to Mason Dixon's corporate needs. Whether these moves were mostly whims based upon Ward King's intellectual curiosity or were the results of a very perceptive vision, they gave the company a competitive edge at a relatively early period in its development.

During the pre-World War II years, Mason Dixon went through two distinct periods of market development philosophy. Initially the company was willing to take whatever business it could get; little thought was given to the effect on profit. As a consequence

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[40]"Mason and Dixon Founders Had Faith in South's Industrial Future," Virginia Trucks, November 1959, p. 21.

[41]The small salesforce was due to the company's reliance on independent commissioned agents for the main selling effort.

[42]Robert C. Williams, "Joining the North and South," Southern Motor Cargo, December 1957, p. 28.

the company lost money on some of this early business.[43] This condition has been the downfall of many truck operators. King, the businessman, soon saw that sales efforts must be directed toward traffic that at least offered a possible profit. Due to the limited number of locations served and the lack of terminal facilities, Mason Dixon sought volume traffic which required door-to-door service.

Tyson Steele remembered some of the early accounts:

> The first account we got in Knoxville was hauling Tennessee Egg Company eggs to New York; then we got the S. Levewitz Shirt Company. That paid good. We didn't know anything else but to charge rail rates; that was pretty good over the long distance. Pretty good for shirts, not so good for eggs. The Kress business is what got us into Chattanooga. We didn't have a terminal in Chattanooga at that time . . . and we started picking up overalls from Blue Bell on Jackson Avenue. We had several good accounts that developed. After you got the slide going, it mushrooms.[44]

One of the better accounts was with Palm Beach Clothing. The cloth was sent from Knoxville to Sanford, Maine, to be Sanforized. It was then returned to Knoxville for cutting and fabrication into suits.[45] Textiles were to become a major traffic component for most Southern truck lines due to the high concentration of spinning mills in the area. This was true to a greater extent in North Carolina than in Tennessee, however. Martin Long, a lifetime Mason Dixon

[43] King's account of the first load to Memphis is an example of this problem.

[44] Tyson Steele in interview with the author, Knoxville, Tennessee, March 24, 1981.

[45] "Founder Tells of Early Days of the Company," The Rolling Reporter, January 1960, p. 1.

employee and claims specialist, remembered some of the early traffic:

> In those early days Mason Dixon was considered to be a textile carrier; we hauled a lot of [textile] raw materials to the North. We handled a lot of yarn. Mason Dixon's first really large customer was Tennessee Eastman. There was just load after load of yarn from them. We also hauled a lot of yarn from North American Rayon Corporation and American Bamberg, both in Elizabethton, Tennessee. They were both owned by the Germans at the time. I remember that one of those companies flew the Nazi flag when Germany marched into Poland. Those Tennessee mountaineers over there in Elizabethton were about ready to lynch someone over that.
>
> We handled a wide variety of volume traffic; flavoring syrups for Pepsi Cola, for Nehi, for Coke-Cola. And shoe polish. And shoe findings, that's half soles and heels. That's something that has pretty much disappeared from the scene today, but the old Sullivan Rubber Company in Winchester, Virginia, would ship trailer load after trailer load of heels and half soles. . . .
>
> In the 1930's and 1940's, Mason Dixon was more of a volume carrier. . . . At that time there was more profit in handling volume traffic because the expenses were so great in proportion to [LTL] revenue. Volume traffic . . . that was the way Mason Dixon got established.[46]

The problem with concentrating on volume movements of textiles was that revenues became highly dependent upon the degree of motor competition and the state of the market for textile products:

> in the upper 1930's, April was always the worst month of the year. I can remember S. T. King or Jack Dempsey, or whoever it was, getting on the phone and start calling the Traffic Managers down in the Carolinas who were shipping piece goods, even unfinished piece goods, which were lower rated than anything. We were glad to handle anything and we would call around and get enough of that low rated traffic in, something to handle during April. By May it would always pick up.

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[46]Martin M. Long interview with the author, Kingsport, Tennessee, February 11, 1981.

> This hasn't happened in the last decade or two, as much as it did in the 1930's. Maybe it was because the company was so strongly textile oriented, see, all the eggs pretty much in the textile basket. Anytime the textile industry was in a slump we were in a slump. No yarn to haul North and no finished product to haul back to the South. That has changed now. . . .[47]

Later, beginning in 1936 or 1937, Mason Dixon's sales force started to segment the market. They continued to seek volume traffic but also made specific efforts to develop less-than-truckload (LTL) accounts along the primary New York--Chattanooga--Atlanta route. Based upon experience gained in servicing the first S. H. Kress account, E. Ward King determined that there was a demand to move many small-lot, high-priority shipments between the North and South. A class of service termed "First Express" was initiated to meet that demand.[48] In this offering of the mid-1930s, Mason Dixon was pioneering a practice that forty years later would be titled the Marketing Concept--provide your customers with services they need. Tom W. Kent, Roanoke, Virginia, Terminal Manager in the mid-1950s, was involved with running the First Express:

> During 1936 and 1937 we were running packing house freight from New York to Atlanta. This was a hot run, and with it we were busy building a reputation for service

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[47]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[48]First Express was a Mason Dixon service innovation in which numerous small, high priority shipments were dispatched from New York City to Knoxville, Chattanooga, and Atlanta. The company offered second morning delivery in Atlanta. At first one truck a day was sufficient, but within a few months it became necessary to add a second and, sometimes, a third.

> that became well known in the industry, as well as with customers. I remember that the maintenance people, among others, were waiting outside the terminal for the truck to arrive from New York, and it did not stay in Kingsport long enough to talk about it.[49]

Mason Dixon's salesmen concentrated on selling the major department stores in the Southern service area on the idea of specifying First Express service for their inbound merchandise. The service was extraordinary; soon

> all the big garment retailers down there in Atlanta were Mason Dixon accounts. We were handling them out of the garment district in New York City.
>
> The shipments were being consolidated in what we called "packing houses." They would go out to all those lofts and gather up all the little packages. Time was of the essence. We were giving second morning delivery on that stuff.[50]
>
> . . . .
>
> The service was so consistent that they would advertise in the paper that the following day, maybe not the day the stuff came in, but the day following, they [the department stores] would run ads and if you were late you were in big trouble.[51]

By the end of the decade Mason Dixon had developed a marketing program that identified two desirable traffic segments; volume loads and express shipments. Truckload service was performed for low cost, bypassing terminals and interchange points. At that

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[49]"Recall Experiences During Past Years," <u>The Rolling Reporter</u>, September 1957, p. 5.

[50]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[51]George A. Maiden in interview with the author, Kingsport, Tennessee, July 24, 1981. Maiden was Atlanta Terminal Manager in the late 1930s.

time rates on such traffic were attractive according to Martin Long. The other traffic flow, express less-than-truckload shipments, required an extensive system of local agents, pick up and delivery services, consolidation terminals, and rapid interchange points. The high cost of providing these services was balanced by higher rates. In seeking this traffic, however, Mason Dixon was years ahead of the rest of the industry. At this early date the company's executives saw that serving diversified markets eased the problem of variability of demand.

5. EFFECTS OF THE MOTOR CARRIER ACT OF 1935

Two separate sets of conditions contributed to the substantial growth in the trucking business in the early 1930s. First, Depression Era economic conditions created a market opportunity for motor carrier service and much less-than-carload (LCL) rail traffic was captured by truckers who offered better transit times. Second, a lack of effective economic regulation at either the federal or state level resulted in few restrictions on entry and no minimum service standards. The number of small, marginally successful trucking operations grew rapidly. According to the 1935 Census of Transportation, the first national inventory of motor carrier facilities, there were 59,612 proprietors of truck lines operating 188,809 vehicles and 61,216 trucking companies. In 1935, truck lines had operating revenues of $530,900,000.[52]

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[52] "Motor Trucking--A Half-Billion-Dollar Industry," Business Week, April 10, 1937, p. 22.

Competition became intense. Trucking historian Wayne Broehl, Jr., wrote:

> malpractices, not always illegal under existing laws, [were] seriously detrimental to the industry. Rebates, refunds, and unearned discounts were given to shippers; freight bills would be nonexistent or weights recorded incorrectly; oral defamation and legal suits of harrassment were used against other carriers. Good safety practices were ignored; insurance responsibility was in many cases inadequate or nonexistent. These cases were in the main confined to the fringes of the industry, but they gave the industry a "black eye" that took many years to live down.[53]

Since there was no reporting requirement for financial and operating statistics, it is impossible to obtain accurate information, but authorities agree that trucking companies faced "an enormous number of individual failures."[54]

The unsettled conditions which prevailed in the industry brought forth demands from several quarters that some sort of governmental regulation be initiated. The Supreme Court stated that, prior to enactment of the Motor Carrier Act of 1935, the industry

> was unstable economically, dominated by ease of competitive entry and a fluid rate picture and that it became over-crowded with small economic units which proved unable to satisfy the most minimal standards of safety or financial responsibility.[55]

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[53]Wayne G. Broehl, Jr., Trucks . . . Trouble . . . and Triumph--The Norwalk Truck Line Company, (New York, New York: Prentice-Hall, Inc., 1954), p. 51.

[54]"Curry Credits Success of Industry to Vision," Kingsport, Tennessee, Times-News, September 20, 1957, p. 1.

[55]Gayton E. Germaine, Nicholas A. Glaskowsky, Jr., and J. L. Heskett, Highway Transportation Management, (New York, New York: McGraw-Hill Book Company, Inc., 1963), p. 32.

A second group which sought passage of a regulatory package was the larger, established motor carriers who had begun operations prior to and during the 1920s. They saw the large influx of new trucking firms, with their marginal cost pricing practices, as a market spoiling menace. It was not merely a case of survival of the fittest because in the process of besting their competition, even the well-established carriers were in danger of failure.[56] These carriers lobbied for economic regulation to place limits on entry into specific markets and to control rates, particularly minimum rates.

Industrial shippers may have been pleased by the generally low level of rates caused by the highly competitive market conditions, but with such low revenue levels, carriers were unable to maintain an adequate level of service. Claims went unpaid, shipments were often delayed by mechanical breakdown or accident, and transit times were unreliable. Industrial shippers felt that introduction of economic regulation would strengthen and stabilize the industry and that motor transport service levels would improve. If such service came at slightly increased cost, the trade-off was worthwhile.

A fourth group that lobbied for regulation was the Association of American Railroads. In their nearly half-century of experience

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[56] William J. Hudson and James A. Constantine, Motor Transportation, (New York, New York: Ronald Press Co., 1958), p. 463.

with the Interstate Commerce Act, the railroads had decided that government control was a distinct and unwelcome burden. Rail operators saw the developing motor carriers as potential competitors and felt that imposition of the same burden of economic regulation would serve to make truckers less effective competitors.

Even some of the small truck line operators felt that prevailing conditions required improvement. Most of these operators were barely surviving and had little prospect of long term prosperity. In addition, a flood of highly restrictive and often contradictory state regulations in the early 1930s "convinced many truckers that they would be better off under a Federal law."[57]

The pro-regulation lobbying efforts of the special interest groups coupled with a decade of unsuccessful efforts on the part of the states to implement a comprehensive and effective program of economic regulation finally forced Congress to act. The result was the Motor Carrier Act of 1935.

Passage of the act ushered in a new era for motor transportation. It has been said that this piece of legislation marked the beginning of the true industry status of motor carriage.[58] The purposes of the Act were to 1) introduce an element of stability

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[57] "Highway Regulation at Last," Business Week, August 10, 1935, p. 12.

[58] Harry G. Williams, Motor Freight Traffic, Facts-Fundamentals-Economics, (Hartford, Connecticut: Freight Traffic Research Institute, 1939), p. 65.

into the industry, 2) enhance service and safety standards in motor carrier operations, and 3) provide for increased financial responsibility of trucking firms. Table 2.1 provides a brief outline of the provisions and purposes of the primary sections of the Act.

6. THE EFFECTS OF REGULATION ON THE MASON AND DIXON LINES

The "grandfather clause" of the Act provided that, upon application, motor carriers would be issued Certificates of Public Convenience and Necessity for those routes and for those classes of service in which they had been engaged prior to June 1, 1935. The purpose of this clause was to protect the interests of established firms and to ease the administrative burden of the Interstate Commerce Commission. Under provisions of the "grandfather clause," Mason Dixon made application for its New York to Atlanta route. Due to the large number of applications filed, it was not until December 10, 1941, under Docket Number 59583, that a Certificate of Public Convenience and Necessity was issued to Mason Dixon granting interstate authority to transport general commodities on routes to and from Atlanta, Georgia through Tennessee and Virginia to points in Pennsylvania, Maryland, Delaware, New Jersey, and New York.[59]

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[59] Interstate Commerce Commission Reports, Motor Carrier Cases, (Washington, D.C.: U.S. Government Printing Office, Vol. 8, May-September 1938), page number unknown.

Table 2.1. The Motor Carrier Act of 1935

Provisions	Purpose
Common carriers must obtain a certificate of Public Convenience and Necessity. (CPCN)	To provide a means to limit entry, thereby controlling competition and ensuring the qualifications of carriers.
"Grandfather clause," carriers already in business may be issued CPCN automatically.	To protect the interests of established carriers.
Rates must be just and reasonable, non-discriminatory, published and adhered to. Notice of change will be provided in advance.	To eliminate destructive price competition and to assure that charges were compensatory for the service rendered.
Merger, acquisition and consolidation must be approved by ICC in advance.	To control competition by assuring that a strong carrier does not simply buy up all the competing firms.
Issuance of securities by motor carriers must have prior approval of the ICC.	To protect the interests of investors. Funds so generated must be used to increase the carrier's assets.
Motor carriers will maintain and submit the ICC a uniform system of accounts and reports.	To provide a statistical basis for the program of economic regulation. Also to measure national freight traffic flows.
Dual operations, common and contract carriage in the same geographic area, are prohibited.	Assured equality of treatment of all the carrier's customers.
Unreasonable discrimination prohibited.	A general provision to cover practices not controlled by other sections of the Act.
Minimum levels of cargo and collision insurance established.	To protect shippers against loss and to similarly protect other motorists in case of accident.
Safety standards for vehicles and vehicle operators established.	To reduce the potential for accidents.

Source: Johnson, James C., Trucking Mergers, (Lexington, Massachusetts: Lexington Books, 1973), pp. 36-49.

To deal with the complexity of compliance with the ICC's requirements, a number of functional specialists were recruited by Mason Dixon during the late 1930s. According to W. F. (Shorty) Kestner, who was later Director of Purchasing, this action characterized King's policy of hiring the best people available to solve special problems. Kestner, who was closely associated with King for more than forty years, feels that this policy was instrumental in the continued success of Mason Dixon.[60]

One of those capable people recruited by King was John B. (Jack) Dempsey. Dempsey began a twenty-five year career in railroading as a clerk for the Atlantic Coast Line in 1903. An ICC Practitioner, he later entered the commerce business in Washington, D.C., and represented short line railraods and steamship companies in presentation of proposed rates and tariffs before the Commission. He had been instrumental in founding the National Motor Truck Association which later became the American Trucking Associations, Inc., and participated in formation of the Motor Carrier Act of 1935. In addition, he served as Chairman of the committee which wrote the first National Motor Freight Classification. Appointed General Traffic Manager for Mason Dixon on January 15, 1937, he supervised both Sales and Traffic Departments and was responsible for preparation

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[60]W. F. Kestner in interview with the author, Crown Colony, Kingsport, Tennessee, February 12, 1981.

of all applications for Certifications of Public Convenience and Necessity as well as tariff formulations.[61]

A general axiom in all modes of transport is, "The best way to handle claims is to prevent them." The man hired to practice this philosophy for Mason Dixon was W. D. McLain. Another executive with extensive railroad credentials, McLain was appointed head of the Claims Department in 1936. He saw a direct relationship between safety and claims prevention and gained national recognition for his efforts in these two areas. McLain became a

> widely known claim authority, in 1937 drafting the first set of rules for claims work in the motor carrier field which formed the backbone of ATA's Freight Claim Rule Book. He also served as chairman of the ATA Freight Claim Council for six years.[62]

By the time he retired at the end of 1963, McLain had risen to the position of Vice President of Claims and was a Director of the Corporation.

7. THE RECESSION OF 1937--1938

One of the requirements of the Act of 1935 was the submission to the ICC of a comprehensive array of operating and financial statistics of regulated truck lines. These reports were to begin

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[61] "J. B. Dempsey, Mason-Dixon Official, Dies," Kingsport, Tennessee, Times-News, March 28, 1952, p. 9, and "J. B. Dempsey Funeral to be Held Today," Kingsport, Tennessee, Times-News, March 30, 1952, p. 10-A.

[62] "Mason & Dixon Lines Names McLain V-P; Other Officials Raised," Transport Topics, April 24, 1950, p. 5.

in calendar year 1938. Many motor carrier managers took the position of John Ernsthausen, founder of Norwalk Truck Lines, at one time a major Mid-West carrier:

> To John's mind, the business of a truck line was to truck freight--the more freight, the better. Anything that did not contribute directly to the movement of freight was incidental. Even the profitability of the shipment was subordinate to the basic service itself. A truck load was not a certain number of dollars of revenue, but rather, a load of physical goods to be moved for someone else. If one moved enough freight, in a careful manner, the profitability would eventually show up by itself.[63]

Needless to say, managers with this point of view felt gathering and reporting a mass of statistical data that did not directly relate to hauling freight was a wasteful activity. An external condition was developing, however, which would demonstrate the value of financial and operating statistics as a management tool.

Beginning in late fall, 1937, there was another downturn in the national economy. This period of stagnation was neither as severe nor of such duration as that which followed the stock market crash in 1929. However, for motor carriers it proved disastrous:

> To most companies that had been through the Great Depression, the 1937-38 downturn, while serious enough in its own right, was merely a wave in comparison to the precipitous drop in 1929-32. But this was not true of the trucking business. Most motor carriers had weathered the 1929 depression fairly well, and many . . . had actually grown much stronger during this period. The 1937-38 downturn was, to most motor carriers, the "Great Depression."

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[63]Wayne G. Broehl, Jr., Trucks . . . Trouble . . . and Triumph--The Norwalk Truck Line Company, (New York, New York: Prentice-Hall, Inc., 1954), p. 62.

> Fortunately, the situation did not prevail for long. The 1937-38 downturn was to hold for many months, but the basic ability of the trucking companies to meet the depression needs turned the trend much more rapidly for them, and by mid-1938 things were back to normal.[64]

One of the reasons the Recession of 1937-1938 was such a serious problem was that it was unexpected, and by the time most carriers' management reporting systems indicated that a problem existed, many firms were already bankrupt. Part of the problem was speed. Virtually all the manual accounting systems in use throughout the industry were based on a monthly accounting cycle. Books were closed at the end of each month and consolidated on an annual basis. In the case of the 1937-38 Recession, traffic fell off beginning in early October 1937. By the end of October, managers knew that it had been a light month, but it was mid-November before the accounts were finally tallied and the true dimensions of the downturn could be grasped. By then the situation was six weeks ahead of them. It was a case where remedial efforts, such as cost reductions, could be neither timely nor accurately targeted.

Mason Dixon suffered the same fate as the rest of the industry.

> [E. Ward King] went to the American Trucking Associations Convention in 1937 only to return and find that business had dropped 50%. Efforts were made to try to cut expenses and he visited each terminal to tell them what he wanted to do. At one terminal, he confronted a manager who said,

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[64] Wayne G. Broehl, Jr., Trucks . . . Trouble . . . and Triumph--The Norwalk Truck Line Company, (New York, New York: Prentice-Hall, Inc., 1954), pp. 63-64.

"Well, I believe it can be done." Mr. King stated, "If you don't think it can be done, then I will find someone who can."[65]

Mason Dixon's executives decided that a more timely information processing system was absolutely necessary. In late 1938, the company became one of the first carriers in the nation to purchase an International Business Machines (IBM) accounting and management information system. It became possible to prepare daily status reports with only a forty-eight hour lag time. The company's use of such advanced systems not only prevented a reoccurrance of the information lag experienced during the recession, it also provided one basis for their future competitive advantage.

8. PERSONNEL POLICIES AND LABOR RELATIONS

Nepotism is traditional in the motor carrier business and is not necessarily a negative practice. It is easy to understand that managers would want to employ subordinates they knew, trusted, and felt could be relied upon. Also, if the enterprise were successful, they would want to share the good fortune with family members. The negative aspect of family employment is the danger that a poor performer will be retained or promoted based upon a family relationship. The practice of employment of family members

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[65] "Founder Tells of Early Days of Company," The Rolling Reporter, January 1960, p. 5.

is so common that the truck line operator who strictly refuses to hire a relative is cause for comment.[66]

Another common practice is to employ friends and relatives of present employees. In the process of interviewing long-time employees almost all reported close relatives employed by the company.[67]

The King family has been well-represented among Mason Dixon employees. At least two of E. Ward King's brothers were hired and Stewart rose to position of Executive Vice President. King's father, John R. King, after retiring from the ministry, served as a Terminal Manager for a short time and was later in charge of a management reading program at the Kingsport headquarters. Both King's sons, E. William (Bill) and John R. (Jack) worked as part time employees from the time they were in high school, and his daughter, Margaret, was an office worker.[68] Two of Roy Moore's brothers also worked for Mason Dixon in the 1930s, but left the company when Moore sold his interest in 1939.

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[66] In an interview with the author, Tyson Steele mentioned that Bowman Transport would not employ the owner's relatives and how unusual that practice was.

[67] M. D. Hawk in interview with the author, Kingsport, Tennessee, August 19, 1981; W. F. Kestner in interview with the author, Crown Colony, Kingsport, Tennessee, February 12, 1981; James C. Ramsey in interview with the author, Kingsport, Tennessee, April 15, 1981; and Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

[68] Margaret (King) Norris in interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

In conversations with early Mason Dixon employees, one recurring idea was that they considered themselves to be part of a family group. This feeling was supported by the King family.[69] A Mason Dixon family identification served to bolster employee morale, increase individual motivation, and provide job satisfaction. This family feeling was strongest in the 1930s and has continued, to a more limited extent, into the 1980s.

Factors which contributed to the Mason Dixon family feeling in the 1930s were the small size of the firm, the working manager-owner status of Moore and King, and the frequent personal and social contacts between employees outside the work environment.[70] Company sponsored parties were popular entertainment prior to World War II; these also contributed to group identification. Ray Warren was responsible for development of Mason Dixon's Personnel Department; he remembers the parties:

> In the early days we liked to get the people together. We would get the Civic Auditorium and put on a show and have some food and after that they would draw for door prizes. People who were talented would appear and we would have sort of a variety show. We had games for the kids to play in the outer rooms while the adults were watching and participating in the show.
>
> . . . .
>
> Mr. King would have his cook bake a lot of hams and then have baked ham sandwiches that were out of this

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[69]Margaret (King) Morris reiterated this point in an interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

[70]Church, civic, and school activities were recognized in the company newsletter. Margaret (King) Norris indicated that Mason Dixon employees tended to live in certain Kingsport neighborhoods.

world. He was right up there in the front row and this went on until we sort of outgrew it. We shouldn't have outgrown it. . . . .

Those were the days when we had the Gearshifter's Club [mid-1930's through early 1940's]; a bunch of drivers. Mr. King would come over, sit down with them, hear their complaints, and make constructive suggestions. I think this did an awful lot to promote better relations with the drivers. Sometimes they would call him at home at night with their problems or suggestions. That went on up until the time we were organized and that was too bad. Mr. King was so nice to the drivers and when they started their union activity he just couldn't understand why they didn't come to him and sit down and talk.[71]

The Gearshifter's Club was initiated for two purposes. First, it was a means of enabling the drivers to air their grievances and be assured that someone in management got the message. Second, it promoted the safety program and gave recognition to those drivers with good driving records.[72]

Emory Flemming started driving for Mason Dixon in the late 1930s and remembers:

We all had uniforms in those days--E. W. kind of wanted us to wear uniforms. In fact, if you had enough time without an accident the Safety Department would give you a uniform for safe driving instead of giving you a watch.

We got a watch for ten years, a ring for fifteen years, and a set of silverware for a twenty year award and for twenty-five years we got a big silver tray, . . .

In the old days, you know, they gave you a shirt, a couple of shirts, a jacket, or sometimes, a complete uniform for a year without an accident. So, that sort of started them wearing a uniform and most of us just got into buying

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[71]Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

[72]Ford Supy, "The Mason & Dixon Gearshifter's," Fleet Owner, October 1937, pp. 30-33.

> them. They were about as serviceable as anything we could find to wear on a truck. It might have been a little advertisement for the company, too. But the old man, E. W., stressed neatness in his drivers and tried to stress the importance of good manners.[73]

Loyalty to the company was expected and company loyalty to long term employees was given in return. Fred Green cited a typical example of E. W. King's paternalistic treatment of one driver.

> There's one thing about Mason Dixon, they never would fire anybody that done [sic] half-way right. E. W., I guess, would't fire anybody, regardless of what they had done, if they started out with him. . . . He had one driver who started out with him, Joe Leach, who got to where he couldn't make long runs so E. W. let him come to Knoxville every day. After he got to where he couldn't do that E. W. gave him a stop clock and he walked around the Dispatch Office; supposed to be the night watchman . . . . When he got to where he couldn't even do that E. W. sent him to the hospital and said, "Charge me. Send the bill to me."[74]

Beginning in the mid-1930s and continuing to the present, Mason Dixon employed a master personnel policy which consisted of two elements: promote from within whenever possible and seek the best available specialist if it became necessary to hire an outsider. The effects of this policy have been visible throughout the history of the company.

Employers and employees alike benefit from the practice of promoting existing eligible employees to fill vacancies rather than

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[73]Emory Flemming in interview with the author, Kingsport, Tennessee, December 23, 1980.

[74]Fred Green in interview with the author, Knoxville, Tennessee, November 11, 1980.

seeking new personnel from outside the company. The employees enjoy upward mobility potential and have expectations that if they are productive, their efforts will be rewarded. The company benefits from a more stable work force and has greater expectation of successful employment from a familiar worker. Over the years, Mason Dixon has shown substantial preference to promotion of existing employees over hiring from outside. Senior Vice President Ralph Baldock commented:

> We have never had much luck with floaters; they may work for us a couple years then leave to work for someone else. Just about the time they get to the place where they can really do you some good, they take off and leave you with a hole in your organization.[75]

In order for a promote from-within personnel policy to contribute to a successful operation, it is necessary to ensure that there is a pool of employees who are qualified for promotion. To accomplish this, Mason Dixon consciously sought to recruit a steady flow of young men who were felt to possess the potential to become future corporate managers and executives. These individuals were conducted through an early version of a management training program and assigned to field positions designed to provide a broad range of practical experience. The idea was to have people ready to move up as openings developed. Raymond Warren said company policy was to:

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[75]Ralph E. Baldock in interview with the author, Kingsport, Tennessee, April 14, 1981.

> hire people with potential, go ahead and train him [sic] and bring him along. There will be a day when he will fill a slot perfectly--if not perfectly at least he can do a good job . . . and we expect him to improve.[76]

Being a man of modest formal education, E. W. King placed a great value on a college degree. In the late 1930s, during a time when many truck line presidents had not finished high school and college graduates were a rarity in the industry, Mason Dixon recruited six college graduates in one year.[77] Each of the new recruits who were interested in operational assignments was given basic transportation training in "Mr. Dempsey's Rate School."[78]

For those situations in which no current employee was qualified, an extensive external search was conducted to identify and recruit the best available talent. The outside search was necessary more in the 1930s than later because the pool of in-house talent was not yet established. Two primary examples of the practice of hiring outside experts were the cases of W. D. McLain and John B. Dempsey.

Not all Mason Dixon's early employees were well educated or had extensive transportation experience. Before a formal Personnel Department was formed in 1939-40, the employment of some workers was a casual affair:

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[76]Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

[77]The year was 1939, according to A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

[78]This in-house tariff familiarization program was conducted for nearly a decade by John B. Dempsey, Mason Dixon's resident expert in such matters.

Mr. [Roy B.] Moore did the hiring of drivers. Sometimes I would hear a shrill whistle. Looking out on Clay Street toward Cement Hill there would be a fellow in bib overalls and he would signal like, "Who me?"

Mr. Moore would motion him over. He would say, "Hi, Fellow. What's your name?"

The guy would tell him.

"Well, I'm Roy Moore. Glad to know you. Where do you live?" After he got his answer, Moore would continue, "Ever drive a truck?"

"Well," the guy would say, "a little pick-up, but nothing like you fellows have here."

Moore would say, "But you could learn, couldn't you? Pretty smart aren't you? Well, how would you like to drive to New York?"

"What?"

"Yes, I could send you to New York, or Philadelphia, or wherever."

The guy would be all bug-eyed and say he didn't think he could drive to places like that.

Mr. Moore says that they could train him. "If you would like a job as a driver I could send you out this afternoon at 4. It's 1:30 now; go home and talk to your wife. If you want to go, we will pay you $12.50 after you finish your student trips. We will send you out with two other drivers on three student runs for which we will pay you $5 and buy your lunch."[79]

9. CONFLICT IN OBJECTIVES LEADS TO OWNERSHIP REORGANIZATION

Business firms often list growth as one of their primary corporate objectives. In motor trucking, growth may be accomplished by two methods. First, a carrier may seek to increase the amount of traffic carried over existing routes by expanding the line's market share or by somehow developing new traffic flows. The second growth

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[79] Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

option, and the one most practiced, is to enlarge the line's operating territory. The incentive for expansion of the route structure lies in the belief that the carrier which can offer through service to and from distant points enjoys a competitive advantage over carriers who must interline traffic. Single carrier service is preferred by both shipper and carrier since it offers greater control: it is faster, safer, and administratively simpler. Carriers particularly appreciate not splitting the revenue.

Geographic growth is accomplished by petitioning the ICC for new operating authority or by purchasing existing operating rights of another truck line. Prior to the late 1970s, the Commission's policy was to grant few requests for new authority; therefore, purchase of certificates was the more popular practice. Carriers could grow from local haulers to coast-to-coast movers through the process of tacking together numerous short routes to form a national network. Formation of Associated Freight Lines in the late 1930s by Buddy Horton has already been mentioned. Horton's idea was to buy out most of the major carriers in the East-South market. The result was to be a line with considerable geographic coverage and market dominance.[80]

Associated's representatives approached most of the carriers in the East-South region and sought to buy them out. C. Grier Beam,

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[80] How the promoters planned to satisfy the ICC's merger and consolidation requirements remains unclear. Their application for some of the acquisitions were later denied by the Commission.

founder of Carolina Freight Carriers, reported that H. D. (Buddy) Horton had made him such an offer.[81] Associated's approach to Ward King and Roy Moore was probably typical. They were offered a reported $1,000,000 for the Mason Dixon operation.[82] In addition, King and Moore were to receive lifetime appointments as executives with the new, super truck line.

King evidently saw the benefits to be gained from geographic expansion but saw himself as an acquirer, not an acquired. King apparently liked being in charge too much to ever accept a subordinate position in another's organization. He commented on one occasion that he " . . . would't work for somebody else; he'd be too 'ornery' to work for somebody."[83] For whatever reasons, King was not inclined to sell his interest in Mason Dixon to Associated.

There is evidence that Buddy Horton tried to coerce King to sell. M. D. Hawk, longtime Mason Dixon employee, tells of being in Atlanta with King and overhearing a telephone conversation between King and Horton:

> HORTON: Ward, this is the last time I'm going to offer you [a chance] to come into Associated with us. We will make you a Vice President.

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[81] C. Grier Beam in interview with the author, Cherryville, North Carolina, April 7, 1981.

[82] Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980. Warren's account is based upon hearsay. The $1,000,000 seems too high since company records show that 1938 gross operating revenues were $1,192,000 and after tax profits to be $50,805. This event is also reported in "3 Men, 3 Trucks, Hard Work Wrote Mason-Dixon History," Transport Topics, October 20, 1958, p. 40.

[83] Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

KING: Buddy, I'm not interested. After a year or so they will take away that position, that big salary and kick us out on our ear. That's what they are going to do to you, too, Buddy.

HORTON: I don't think so. This is your last chance. If you don't come in with us, well, we are going to break you, Ward King.

KING: Hell, I was broke when I started Mason Dixon.[84]

Roy Moore, on the other hand, had favorably considered the possibility of selling his interest. There was evidently a serious disagreement between Moore and King regarding corporate objectives. King wanted to purchase more vehicles, other carriers and expand as much as possible. Moore was more cautious; he wanted to get out of debt and stay out.[85] Perhaps the difficulties encountered during the Recession of 1937-38 helped convince Moore of the riskiness of his position; perhaps the offer from Associated was the deciding factor. The complete set of reasons will never be known, but in early 1939, Roy B. Moore decided to sell his equity interest in The Mason and Dixon Lines, Inc.

Under the terms of the original partnership agreement and later Articles of Incorporation, if either of the owners decided to sell his interest, he must give the other stockholder first option to buy; thereafter he was free to place his shares on the open

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[84] M. D. Hawk in interview with the author, Kingsport, Tennessee, August 19, 1981.

[85] Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

market. In late April 1939, King was given the previously agreed upon ten days option on Moore's shares. The amount and terms of the sale are still considered proprietary information by the King family, but Ward King is quoted in newspaper accounts of the transaction to have "sweated blood" in his efforts to raise the purchase price within the time limit.[86] Whatever his efforts cost him, the shares were transferred to E. Ward King making him the sole owner of the Mason and Dixon Lines, Incorporated, on May 5, 1939.

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[86]E. Ward King Acquired Complete Holdings in '34 [sic]," Kingsport, Tennessee, Times-News, September 20, 1957, p. 4.

CHAPTER III

PERIOD OF PREPARATION: 1939--1957

1. PRE-WAR MARKET DEVELOPMENT

By the end of 1939, the Great Depression was drawing to a close. The Federal government's fiscal and monetary policies, the social programs designed for economic reconstruction, and the war in Europe provided the means to conclude nearly a decade of domestic economic stagnation. Even though American entry into World War II was still two years away, American production of war materials for the conflict in Europe was reducing domestic unemployment and building the strength of the economy.

The year 1939 proved to be a good year for Mason Dixon. Although only six years old, the company had operating revenues of more than $1.75 million, enough to earn classification by the Interstate Commerce Commission as a Class I Common Carrier. Earnings slipped slightly from the previous year's $50,800 but were still a respectable $46,000.[1]

Ward King was determined that the company, now under his personal management, should grow. One means to accomplish such growth was to increase sales in territories already served; another

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[1] "Comparative Profit and Loss Statement, 1938-1949," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., 1949), p. 1.

was to expand the geographic area of service. He swiftly set about implementing both these complementary courses of action.

Prior to 1939, there had been few field salesmen employed by Mason Dixon. Most of the sales work was handled by commissioned agents who operated the terminals. The half-dozen or so company salesmen had been supervised by S. T. King, the company's General Agent. In a program designed to increase the effectiveness of Mason Dixon's sales effort, these salesmen, supplemented by several newly hired representatives, were re-assigned to the Traffic Department under the supervision of John B. Dempsey.[2] The marketing effort was based upon selling high quality LTL service (such as the First Express), reducing claims, and relying heavily upon personal relationships developed by Dempsey with major shippers of volume traffic.[3]

2. GROWTH BY ACQUISITION OF MOTOR TRANSPORTATION

The second method of increasing sales revenue, that of expanding the geographic area of service, was accomplished by purchase of Motor Transfer Company of Bristol, Tennessee. Since the issue of acquisition and consolidation of motor carrier operations is central to the entire industry and has figured prominently in the corporate history of The Mason and Dixon Lines, Inc., a brief background on Mason Dixon's early mergers is included here.

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[2] "E. Ward King Acquired Complete Holdings in '34," [sic], Kingsport, Tennessee, Times-News, September 20, 1957, p. 4.

[3] Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

Prior to passage of the Motor Carrier Act of 1935, there was little incentive for one truck line to buy another. With no regulatory barriers to entry, the only reason to purchase another truck line would be to obtain equipment, terminals or whatever good will might be possessed. Only in the states which sought to impose a measure of economic regulation on truck operators by restricting the issue of operating permits was there reason to buy intrastate operating authority. John Keeshin, a prominent figure in the development of the motor trucking industry, mentioned the importance of such intrastate operating rights in a Fortune interview:

> In shopping routes, Keeshin & Co. did not look for well-equiped truck fleets. Such equipment would be of small use to them since all tractors and trailers in the Keeshin system had to be interchangeable and practically uniform. What they looked for were strategic terminals, good potential (if not actual) tonnage, and above all, the state certification of authority to haul freight over a given route. It was the certificate that controlled everything, and for two prime reasons. 1) It is far easier in most states to secure a franchise by purchase than to apply to a Public Service Commission for issuance of a new one. 2) Because of a Grandfather clause in the Motor Carrier Act, only routes in operation on June 1, 1935, are sure of ICC permission to do business.[4]

Writing on the same subject forty years later, Cleo Crouch, one of the founders of Crouch Brothers, a successful Midwestern carrier, said:

> First, we looked for a line that had authority that would fit well with the authority we already had. . . . Second, we had to find a truck line that was the right price, a line with a price that reflected a good value

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[4]"Freight by Highway," Fortune, February 1936, p. 114.

> within the Crouch system. There had to be a balance. Any authority might be worth any amount of money, but the authority's value changes, depending on the system it's being linked to. A third, final and basic problem in buying a line is--will the owner sell? And if he isn't interested, how can I change his mind?[5]

Subsequent to passage of the Motor Carrier Act of 1935 it became easier, faster and, ultimately, less costly to extend a line's operation through acquisition than to go through the complicated, expensive and time-consuming process of convincing the Interstate Commerce Commission that new authority was justified. During the late 1930s and through the mid-1940s, the schedule of new operating authority hearings was retarded because the ICC was inundated with Grandfather applications. Even with an abridged procedure specified for issuance of these protected operating rights, it took years to work through the nearly 76,000 applcations that were filed.[6] The lead time to obtain a new certificate was unreasonably long when compared with the relative promptness of hearing applications for purchase approval.

A concise analysis of the motives underlying motor carrier mergers and acquisitions is provided by the American Trucking Associations:

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[5]Cleo Crouch, My Life on the Road, (Hicksville, New York: Exposition Press, 1975), pp. 245-246.

[6]Interstate Commerce Commission, Annual Report, 1936, (Washington, D.C.: U.S. Government Printing Office, 1937), p. 70. Reported in James F. Filgas, Management By Logic: A History of Yellow Transit Freight Lines, Incorporated, unpublished doctoral dissertation, (Bloomington, Indiana: Indiana State University, 1966), p. 16.

Why do companies merge? There are usually many collateral considerations involved in a trucking company's decision to merge with or acquire another company. But the dominant motive in almost every instance seems to be a desire to expand service coverage. Better service implies, of course, a stronger competitive position and commensurately increased business.

The effort to broaden service may take the form either of expanding operations by acquiring additional territorial rights, obtaining additional commodity hauling rights, or both. Thus, the thrust of merger movement in the trucking industry over the years has been an emphasis primarily on so-called "end-to-end" mergers. This departs from the pattern in other fields, particularly railroads, where the principal purpose has been the elimination of overlapping or duplicating service.

An analysis of motor carrier unifications shows that end-to-end mergers tend to encourage others in the areas where they occur. A carrier, seeing a competitor expand its service area through a merger, moves quickly to expand its own area of service. In this respect, mergers and acquisitions in the motor carrier industry would seem to improve service and intensify competition. It is this result that has prompted the ICC over the years to look with favor upon mergers in the industry.[7]

One additional asset obtained in many of the early acquisitions was experienced personnel. Often truck lines were being sold by their founders with a condition of sale being that the original owners would be employed by the acquiring company as terminal or division managers. In some cases, they assumed an executive capacity with the purchasing firm.[8]

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[7]American Trucking Associations, Inc., "ATA Current Report No. 21," (Washington, D.C.: October 1968), pp. 7-8.

[8]In the late 1930s, when Buddy Horton was trying to put together the combination which eventually became Associated Transport, he contracted owners of consequential truck lines in East-South service. Part of the deal he offered E. Ward King and Roy B. Moore, as well as C. Grier Beam, founder of Carolina Freight Carriers, was a position as Vice President of the new super carrier. King reportedly

3. MASON DIXON'S ACQUISITIONS THROUGH 1942

Ray Warren worked at the Kingsport headquarters prior to World War II. He recalled:

> I don't suppose Mr. King thought in terms of corporate objectives; that wasn't heard of in the early days. But I think one of the strongest traits of E. Ward King was he was always looking ahead. Thinking in terms of where we can go from here with respect to expansion? What rights can we acquire that will complement those we already have? Shortly after I came [1939] we acquired Motor Transport Company, operated by the Cartwrights out of Bristol. They had intrastate rights between Bristol and Chattanooga. That meant that we could make store-door deliveries. We didn't have to go through the terminal, but stop at any merchant and deliver five or six packages and then go on to the next place.[9]

The motor carrier firms that Mason Dixon purchased after 1935 were acquired primarily for their operating authorities. Such additional authority either allowed Mason Dixon to reach heretofore unserved areas or provided additional points of service in areas already transited. The December 1936 purchase of the George C. Murdock Lines, Dalton, Georgia, was an example of the latter circumstance.[10] These operating rights for both interstate and intrastate traffic allowed additional service points in North

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wondered at the time what would happen when all the Vice Presidents discovered that their positions were largely ornamental and that Horton was going to run things his own way.

[9]Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

[10]"3 Men, 3 Trucks, Hard Work Wrote Mason-Dixon History," Transport Topics, October 20, 1958, p. 40.

Georgia by linking existing service from Chattanooga, Tennessee to Atlanta with another feeder route from Dalton and Rome, Georgia to Chattanooga. The original Murdock headquarters terminal at Dalton continued to be operated and the next month, January 1937, a company-operated terminal was opened in Rome, Georgia.

Another purchase that expanded the points of service rather than the route structure was the April 1939 acquisition of the interstate and intrastate operating authorities of Motor Transfer Company, Bristol, Tennessee. Motor Transfer, one of the first truck lines in Upper East Tennessee, was operated by C. P. and W. R. Cartwright. The Cartwrights had no terminals and instead made pick-ups and deliveries with over-the-road equipment along Highways 11E and 11W between Bristol, Tennessee/Virginia and Knoxville, Tennessee. After the purchase was negotiated, Mason Dixon quickly opened terminals in Bristol, Greenville, Johnson City, and Morristown, Tennessee. One of the provisions of the sale was that the Cartwright brothers be employed by Mason Dixon. C. P. stayed on as the Bristol Terminal Manager while W. R. Cartwright went to work in the Knoxville Terminal. In addition to the operating rights and the services of the Cartwrights, Mason Dixon obtained twenty-nine units of equipment, bringing their total fleet to 240.[11]

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[11]"Mason-Dixon Lines Expands with Purchase of Bristol Firm," Source of newspaper clipping and page number unknown, April 2, 1939. It is possible to speculate that disagreement regarding this purchase was a factor in Roy B. Moore's decision to sell his interest in Mason Dixon. Moore was reported to be content with a small operation while King was more aggressive. Negotiations preceeding this sale must have

Another family operation, Interstate Transfer Company and G. E. Cox Motor Lines, provided the first major territorial expansion made by Mason Dixon.[12] This purchase, finalized in February 1941, opened up new markets in the population centers of Western North Carolina. The combination of these two authorities joined the Mason Dixon route structure at Lynchburg, Virginia, and ran south along Highway 29 to Charlotte, North Carolina, and then on to Fort Mill and Rock Hill, South Carolina. A route went west from Charlotte on Highway 74 to Asheville, North Carolina, and then on to Greenville, North Carolina, via Highway 70. By April 1941, there were company terminals operating at Greensboro, High Point, Charlotte, and Hickory, North Carolina. Consistent with the policy of offering employment to the owner of acquired truck operations, Mason Dixon retained J. Clarence Coggin, the previous owner, and several members of his family as employees. Coggin served as the Carolina Regional Manager until that operation was temporarily suspended in 1943 under provisions of the U.S. Office of Defense Transportation's conservation program.[13]

May 1942 saw the final additions to the basic Southern route structure. By obtaining the interstate and intrastate operating authorities of Cumberland Freight Lines in Nashville, Tennessee,

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taken several months, which coincides with the time period that immediately preceeded Moore's offer to sell his shares to King.

[12]Both companies were owned by J. Clarence Coggin.

[13]Cy Aman, "The Carolina Acquisition," The Mason & Dixon News, April 1942, p. 2.

service was extended west from Knoxville to Nashville, then north to Albany, Kentucky. Along with twenty-one units of equipment, Mason Dixon obtained Cumberland's original headquarters terminal at Nashville, small facilities at Livingston and Cookeville, Tennessee, and a terminal at Knoxville which was quickly consolidated with the company's existing Knoxville facility.[14]

It was also in May 1942 that the ICC approved Mason Dixon's request for issuance of new operating authority from Atlanta, Georgia, through Charlotte and Kings Mountain, North Carolina, to Richmond, Virginia. This new certificate parallelled Mason Dixon's original routes and was authorized for use as an operating convenience only. This restriction meant that no traffic could be picked up or discharged along the way. It was merely to be used as an alternative access between Atlanta and the Eastern markets to by-pass Tennessee and its restrictive truck weight limits.

In the space of three years after assuming control of Mason Dixon, Ward King had added five new operating authorities to the original holdings. This route structure remained substantially unchanged until 1960. It was during the post-war period that Mason Dixon sought to consolidate their basic route structure and establish a position as one of the nation's top one hundred motor carrier firms.

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[14]"Mason Dixon Goes to Nashville," The Mason & Dixon News, September 1942, p. 30.

4. LABOR RELATIONS: STRIKE LEADS TO UNION REPRESENTATION

Industry activity throughout the nation began to revive in late 1939 as a result of demands for war materials in Europe. As the pool of surplus labor grew scarce and the demand for workers increased, labor unions intensified their organizational efforts and escalated the level of their demands. The small size of most motor carrier firms and the fact that the majority were operated by owners who were working members of the organization made trucking an unlikely target for union organization during the years prior to the end of the Depression.

Some Northern and Midwestern truck lines, however, had attained sufficient numbers of employees to warrant the attention of union organizers. In October 1938, the Midwestern motor carrier operators had signed contracts with American Federation of Labor truck drivers covering eleven states from Ohio to North Dakota and Missouri.[15] By 1941, there were some 250,000 members of the AF of L Teamsters Union employed by the nation's 900 or so largest carriers.[16] A general trucker's strike was narrowly averted in the fall of 1941 when negotiations between industry management and Teamsters International broke down and the issues were submitted to arbitration.

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[15] "How is Trucking?" Business Week, June 10, 1939, pp. 23-24.

[16] "Trucker's Truce," Business Week, November 22, 1941, p. 57.

In the resulting settlement, the union felt that it had won its demands, and flushed with this victory, the Teamsters greatly increased their efforts to widen their influence throughout the industry.

Unlike the industrialized North, the South had never been a particularly fertile field for union organizational efforts. Industrial structure, tradition and management determination combined to produce barriers to acceptance of union representation. Ward King's attitude was typical for that place and time. He generally opposed union activities because he felt they could reduce his management discretion and make the task of running his business more difficult. He felt that if he treated his employees properly, they should have neither need nor desire to join a union. Efforts were made to keep Mason Dixon's employees satisfied and motivated through the mechanisms of awards and recognition for operating skills, employee clubs and athletic teams, company-sponsored picnics and holiday banquets, and various other social activities. In addition, King had voluntarily initiated an Employee Bonus Plan in 1938. Under this program, a share of the company's annual profits were distributed to all employees based upon the individual's salary and years of company service.[17]

The question of local union representation in the trucking industry had been faced from time to time and was usually resolved

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[17] "Company Founded with Belief in South's Industrial Future," Kingsport, Tennessee, Times-News, September 20, 1957, p. 2.

on a company individual basis. In the North, it was common to have terminal employees represented by a union. Company managers at Kingsport did not support the idea of labor organizations, but they were realistic enough to know that unions must be tolerated in the industrialized North.

Company policy for the South, however, opposed unionization. Atlanta Terminal Manager George Maiden had successfully "beat" a strike in early 1941.[18] Efforts had been made there to organize the local terminal employees. When the company refused to negotiate with the union, a local strike was called. Maiden was able to recruit casual labor and continue operations uninterrupted. He recalled that conditions were extremely difficult for several weeks; however, eventually the union lost support, and the situation returned to normal.

The most productive target for union organizers is disaffected employees. Working conditions make drivers particularly sensitive to real or perceived grievances, as Martin Long observed:

> There that driver sits for eight or ten hours, or whatever the length of his run is. He doesn't have much to do except think and he thinks of himself, his relationships . . . and his problems, they tend to build. They build them up in their minds . . . of course, some of their complaints, well, they did have varying [degrees of] justification, but they would usually be exaggerated.[19]

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[18]George A. Maiden in interview with the author, Kingsport, Tennessee, July 24, 1981.

[19]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

Emory Flemming, a driver for Mason Dixon in the early 1940s and for forty years thereafter, recalled labor relations at Mason Dixon from a different perspective:

> No, he didn't compensate us well. I'm sure of that. I don't have any bitterness, no anger, no bitter feelings toward the old man [King] at all, but we should have shared in the profits better than we did. I'm a firm believer if a company has good dedicated workers and they are prospering and growing all the time, I think those people out there doing the hard work should share in those profits.[20]

In the fall of 1941, the American Federation of Labor's Teamsters Union demanded that it be recognized as the sole bargaining agent for all road drivers in the Mason Dixon system. Management responded with a proposal calling for an election which would determine the desires of all affected employees. The company was realistic enough to know that simply refusing to deal with the union would not resolve the problem. A publicly published Notice of Policy stated in part:

> The MASON & DIXON LINES recognizes fully the rights of its employees to self organization, to form, to join or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in lawful activities for the purpose of collective bargaining or other mutual aid for protection. . . .
>
> The employees of this company are free to join any Labor Organization they choose and will be free from interference, restraint or coercion on the part of the company or any of its officials, supervisors or representatives.[21]

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[20] Emory Flemming in interview with the author, Kingsport, Tennessee, December 23, 1980.

[21] "Notice of Policy," Kingsport, Tennessee, Times-News, October 21, 1941, p. 1.

The union rejected the election proposal and, in the face of continued company insistance upon a vote of the employees, called a strike on November 5, 1941.[22] Though centered at Kingsport, the strike was highly effective throughout the Mason Dixon system. Non-union personnel could handle freight in the South, but a boycott against Mason Dixon traffic went into effect in the unionized Northern terminals. As a result the entire system came to a standstill. Ray Warren remembered the occasion:

> We got extra pressure from Philadelphia and New York. They said that they were not going to handle any freight that had been loaded or handled by non-union people in the South. This was one thing we just couldn't get around.[23]

At first E. Ward King resisted the strike. He felt it unnecessary, that he had treated his drivers fairly, and that the strike was the result of professional agitation. In a series of bulletins, he tried to convince the striking drivers to come back to work by repeating his pledge to hold a bargaining unit election. He felt time was on his side since 1) the first ten months of 1941 had been profitable for Mason Dixon, and 2) he could hold out long enough for economic pressures to force the striking employees back to work. No one could have foreseen the attack on Pearl Harbor and the tremendous pressure that would be placed upon King to settle the strike.

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[22]"Strike Called by M-D Drivers," Kingsport, Tennessee, Times, November 6, 1941, p. 1.

[23]Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

War was declared on December 8, 1941, and in the next few days, King made repeated efforts to get the trucks rolling again. A newspaper advertisement stated:

> This is our final appeal to the Honor, Loyalty and Patriotism of those who remain on strike. There may be one who will refuse to go back to work in spite of [our] Nation's crying need of our assistance, but we do not believe so.
> As for us, we do not intend to let the Japs or the labor agitators threaten American Democracy longer! Thousands of American boys are fighting and dying for our country. They include our sons and our neighbor's sons and before this conflict is over many of us who are now working for Mason & Dixon will be in the trenches and on the battle fields. So the least we can do now is WORK for the defense of our Country.[24]

And a few days later another page one, banner headline appeared in the Kingsport, Tennessee, Times:

> We earnestly appeal to every employee as a patriotic citizen to return to his job and pledge to you that we will determine at the earliest possible moment who has the majority, and then work out a satisfactory agreement with reference to wages and working conditions.[25]

However, the union held out, and now time was working against Ward King. America's entry into war dictated management's decision to settle the strike on the union's terms. King formally announced the end of the strike on December 14, 1941. It had lasted forty days. Something in King's personal leadership style is reflected in his graceful acceptance of the inevitable. There can be no doubt that

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[24]"Notice to All Employees of Mason & Dixon Lines," Kingsport, Tennessee, Times, December 8, 1941, p. 1.

[25]"Public Notice," Kingsport, Tennessee, Times, December 10, 1941, p. 1.

he was angry with the Teamsters and was personally hurt by those employees he felt had let him down. Then, too, there was the financial loss; the strike had wiped out an entire year's gains. Within a few weeks of the strike settlement, however, E. Ward King personally visited every terminal in the system and delivered his new policy at a meeting of all employees. "We were the best non-union truck line; now we are going to be the best union organization."[26]

In early 1943, the International Association of Mechinists requested recognition as a bargaining agent for all maintenance employees at the main shop in Kingsport and the branch repair station in Knoxville. The National Labor Relations Board conducted an election which determined that a majority of those affected favored union representation. Mason Dixon and the IA of M quickly reached agreement, and a contract was signed on May 18, 1943. At this point, all company employees except office workers and corporate management personnel were represented by a union.[27]

As had been the case in previous situations which demanded highly specialized experience, Ward King sought to recruit an expert in labor relations. He needed someone to represent the company in all future negotiations with labor unions. The search ended on April 1, 1942, when A. Ewing Greene, Sr. was appointed Superintendent

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[26]George A. Maiden in interview with the author, Kingsport, Tennessee, August 10, 1981.

[27]"World War II Brings Many Hardships to Company," Kingsport, Tennessee, Times-News, September 20, 1957, p. 5.

of Transportation.[28] Greene brought with him twenty years of transportation management experience with both railroads and trucking companies. Most recently he had served as the General Operating Executive, Gordons Transport, Inc., Memphis, Tennessee. Since 1940, he had been Chairman of the Negotiating Committee, Southeastern Area Motor Carrier's Labor Relations Association (SAMCLRA).[29] In 1945, Greene was elected President of SAMCLRA; in 1946, he was appointed Mason Dixon's Vice President for Industrial Relations; and in 1957, he was elected Chairman of the ATA's Committee on Industrial Relations. Ewing Greene was a man dedicated to professionalism in employee relations; as such he earned the respect of both union leaders and industry management.

5. MASON DIXON GOES TO WAR

Mason Dixon's experience during World War II was fairly typical of the motor carrier industry. Shortages of manpower, supplies, and equipment had an adverse effect upon both performance and profits. In the area of vehicle supply, however, Mason Dixon entered the war in a strong position.

Prior to 1940, most of the states served by Mason Dixon's operating authority had imposed restrictive weight limits on motor trucks. In order to comply, Mason Dixon operated light Studebaker

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[28] "Transportation Department," unpublished corporate document, undated but probably 1950, p. 4. Cover memo written by A. E. Greene, Sr.

[29] "A. Ewing Greene, Vice President, Knows His field," Kingsport, Tennessee, Times-News, September 20, 1957, p. 11.

tractors and twenty-four foot trailers.[30] These units were small enough to meet the weight restrictions yet had sufficient freight carrying capacity to make profitable operations possible. In 1940, Tennessee, a bridge state with the lowest weight limits in the system, authorized an increase in the allowable gross vehicle weight from 18,000 pounds to 24,000 pounds. Ward King immediately made plans to replace his "mosquito fleet" with larger vehicles which would be able to provide greater economic advantage under the new rules.[31] That year the company acquired forty-eight new units to bring the over-the-road fleet up to 111 tractors and 122 trailers. One hundred three new units were added in 1941, and before the equipment freeze set in, twenty-three new tractors and trailers were procured early in 1942, bringing the fleet up to 157 tractors, 180 semi-trailers, and 45 straight trucks for local drayage.[32]

From that point on, the equipment management policy was, "Make it last." As the war progressed, the fleet suffered from unavoidable attrition. Replacement drivers, inexperienced with hauling loads through mountainous country, were involved in accidents. Some trailers, hold-overs from the mid-1930s, had been repaired and rebuilt many times. According to one account,

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[30]"E. Ward King Acquired Complete Holdings In '34 [sic]," Kingsport, Tennessee, Times-News, September 20, 1957, p. 4.

[31]E. William King in interview with the author, Kingsport, Tennessee, August 11, 1980.

[32]W. D. McLain, "The Mason Dixon Lines on Safety," Commercial Car Journal, July 1942, p. 48.

> Old equipment was worn out and could not be replaced. Replacement parts were almost as difficult to obtain and in many instances our repair shops were making spare parts to keep equipment on the road.
>
> This was a costly type of operation and what equipment the company did keep in operation was maintained primarily from salvaged parts from the company "junk yard" of old and worn-out equipment.[33]

Similar cannibalization procedures applied to tires. "Every time a truck came into the shop for repairs of any consequence, the tires were taken off that truck and put on one that was in good repair but without tires."[34]

Eventually Federal programs to ease motor transport's equipment shortages took effect. By 1945, the war was being won. On the home front, industrial and transport productivity were at an all time high, and in Kingsport, many of the war's pressures were beginning to ease. Mason Dixon was able to obtain new vehicles in 1945 when the Office of Production Management began to allocate more trucks to commercial users.[35] It appeared that vehicle shortages would continue to ease; however, in April 1945 the entire fleet development program suffered a reversal.

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[33]"Critical Manpower Shortage Faced Company in 1943," Kingsport, Tennessee, Times-News, September 20, 1957, p. 6.

[34]E. Ward King quoted in "Those With Over 20 Years Service," The Rolling Reporter, September 1957, p. 4.

[35]"History of Mason Dixon Maintenance," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated), unpaged.

At that time Earl Rogers and C. O. Moore were mechanics, working the midnight shift in the Mason Dixon shop on Market Street. Shortly after 3 a.m. on Sunday, April 30, Rogers was washing some parts in gasoline when the fumes ignited. Rogers was badly burned, and the entire shop quickly burned to the ground. Two employees of the nearby City Transportation Company were able to save Rogers and four trucks from the blaze, but one straight truck, six tractors, and the company's entire stock of spare parts and tires were destroyed.[36] The $100,000 worth of lost supplies and equipment was particularly devastating due to the general scarcity of these items and the difficulty in obtaining replacements.[37]

W. F. (Shorty) Kestner, Parts Manager at the time, was called away from Sunday breakfast by Ward King. Together they surveyed the loss and immediately set about establishing a make-shift maintenance facility operating out of salvaged trailer vans.[38] Later, Kestner and his assistants went through the charred debris searching for whatever parts they could salvage. In later years the company pointed with pride to the dedication and imagination of the Kingsport maintenance and support personnel who kept trucks moving with no maintenance delays during that summer of 1945.

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[36] "Fire Destroys Mason-Dixon Shop," Kingsport, Tennessee, News, April 30, 1945, p. 1.

[37] "$100,000 Fire at Mason-Dixon Shops," Kingsport, Tennessee, Times, April 30, 1945, p. 1.

[38] W. F. Kestner in interview with the author, Crown Colony, Kingsport, Tennessee, February 12, 1981.

6. POST-WAR CORPORATE STRATEGY

To a considerable degree, the American economy is influenced by the attitudes and expectations of American consumers. A decade of the Great Depression followed by four years of rationing and scarcity due to the war created a high level of pent-up demand. After the war, people were optimistic about the future and were eager to enjoy material pleasures so long denied. Therefore, production facilities were quickly transformed to meet this consumer demand.

Motor carriers gained a large share of the substantially increased demand for transportation of both consumer goods and industrial durables.

> While the percentage of growth in inter-city ton miles of freight handled by motor carriers prior to World War II had increased rapidly on a percentage basis, their share of the overall total ran about 10% . . . although the bulk of the heavy war traffic was handled by the railroads, the motor carriers held their volume of inter-city ton miles, their percentage of the total handled, however, dropped back to about 6%. Once the war was over the percentage share of the motor carriers began to rise.
> . . . .
> During the war years, as a matter of national defense, new plant construction, to support the war effort, was intentionally dispersed throughout the country and often located on sites that had no railroad service. Population growth followed the industrial growth creating sizable cities far removed from the old centers. During all this growth, there was practically no expansion in railroad tonnage. After the war, the volume of railroad traffic fell off sharply, but truck traffic continued to grow by serving new industrialized areas and providing service which was ideally suited to general business efforts to reduce inventories. . . .[39]

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[39] E. Frederic Uhrbrock, Jr., The Motor Carrier Industry, (New York, New York: Bear, Stearns & Co., 1965), p. 65.

Before the actual ending of hostilities, E. Ward King foresaw the tremendous post-war potential for the trucking industry. He realized that those companies which were prepared to serve the increased demand for transportation of consumer goods would reap ample rewards. He, therefore, resolved to strengthen Mason Dixon as rapidly as conditions would permit. His master strategy contained three elements: 1) to expand and modernize the system of terminal facilities, 2) to replace the entire fleet of work vehicles, and 3) to recruit and train the next generation of management personnel who would be prepared to meet the challenges of the 1950s and beyond.

Terminal Modernization

Kingsport, Tennessee has always been the pivot point of the Mason Dixon system. Not only is it the site of the corporate headquarters, it is the division point between the Northern and Southern portions of the operation. As the scope and magnitude of the company expanded in the pre-war years, various company activities were scattered around the city, located more as a matter of necessity or chance than by any sort of coordinated plan.

In 1941, a newly organized Mason Dixon Investment Company acquired an eleven acre tract on Eastman Road in Kingsport, only one block from Highway 11, the main operating route. Years later, W. D. McLain recalled the search for a suitable location. We were "looking over every cornfield and cow pasture between Chestnut Ridge and the North Fork, and from Horse Creek to Bloomingdale for a terminal site. All the time Mr. J. Fred (Johnson) had the plot picked out."[40]

The strike and outbreak of war forced postponement of any immediate plans to develop a center of operations at this location. However, increased war-time traffic created the necessity for an improved facility. In spite of shortages of building materials, construction commenced on a new terminal and dispatch office. These were put into operation in May 1944. Later in that same year, a vehicle inspection station also opened on the same site. The fire at the Market Street shop in late April 1945 made it imperative that a new maintenance facility be constructed as soon as possible. Soon, each terminal throughout the Mason Dixon system became a purchasing point securing necessary building materials which were then shipped as filler cargo aboard Mason Dixon trailers to Kingsport. Considering the difficulty of the task, it is remarkable that a shop could be constructed and ready for occupancy by December 1945. The final structure to be built on this site was the corporate headquarters building. Designed and executed by Kingsport architect Allen Dryden, Sr., this contemporary office building was widely regarded for its functional simplicity.[41] Construction began in 1945, and the new

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[40]W. D. McLain, "Down Memory Lane," Kingsport, Tennessee, Times-News, September 20, 1957, p. 4. Recall that Johnson was credited with Kingsport's industrial development.

[41]Architect Dryden was later to figure prominently in the design of a new generation of terminals throughout the Mason Dixon system.

general offices of the company were opened officially in April the following year.

The condition of the other terminals throughout the system was a matter of concern for Ward King during the war, but materials shortages and capital considerations kept him from taking actions to renovate them. According to the Times-News, the company opened only one new terminal during the war; this was at Roanoke, Virginia.[42] However, after the war, King outlined specific goals for a terminal modernization program: 1) to relocate terminals as necessary for better access to customers and highway routes; 2) to get more space to accommodate the anticipated increased flow of traffic; and 3) to implement more efficient cargo handling systems such as draglines and tow-veyors.

After Kingsport, the next terminal requiring attention was New York City, the largest volume operation in the system at the time. Originally, New York operations were handled by a commissioned agent; then the company operated a terminal in a leased facility. As traffic volumes increased, this terminal became too small, the parking area became congested, and the company began to seek a larger facility. The situation was further complicated on September 1, 1946, when Local 807 of the International Teamsters Union called a general strike against all motor carriers operating

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[42] "Critical Manpower Shortage Faced Company in 1943," Kingsport, Tennessee, Times-News, September 20, 1957, p. 6.

in New York City.[43] King later recalled that he had anticipated an early settlement of the strike, so he elected to wait out the situation. The strike ran into November and proved to be a costly experience for both the striking Teamsters and the idle trucklines. As a result King resolved to accomplish two purposes with his next terminal expansion: 1) to become immune from further conflict with the Teamsters in New York City and 2) to enhance his capability to provide service throughout a broader market in the New York area.

The terminal in York, Pennsylvania, which had been operated by a commissioned agent since 1935, was converted to a company owned operation on July 7, 1947.[44] The same year a new terminal was opened in Reading, Pennsylvania. This concentration of operations in Pennsylvania was intended to reduce the degree of reliance on the New York City operation.

The terminal tie with New York City was completely severed in July 1949, with the formal opening of a $250,000 facility in Secaucus, New Jersey. The new terminal, twenty minutes from downtown Manhattan, was intended to be " . . . a consolidated Metropolitan Terminal . . . which would serve as a consolidating and distribution center on all freight originating in, or destined to, the metropolitan area of New York and New Jersey."[45] The new terminal was the largest

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[43]"Company Starts Recovery Program Soon After War," Kingsport, Tennessee, Times-News, September 20, 1957, p. 7.

[44]"Mason and Dixon Opens First of Four Terminals on July 7 at York, Pa.," Transport Topics, June 26, 1950, page number unknown.

[45]"New Terminal Building Program Is Started in 1949 by Mason & Dixon," Kingsport, Tennessee, Times-News, September 20, 1957, p. 10.

facility in the Mason Dixon system. It included loading docks, a warehouse, maintenance shop, and office space. It was an advanced design for a time when many terminals used by motor carriers throughout the nation were little more than converted warehouses. It set the pattern for later terminal designs as it was engineered to function specifically as a motor freight facility.

In 1950, new terminal facilities were opened in York, Pennsylvania and Chattanooga and Rogersville, Tennessee. The York and Chattanooga buildings were replacements for older structures that had become too small. The Chattanooga design was very modern for its day, with a twenty-door cargo area, a two-story office complex, and a driver's dormitory.[46]

April 1951 was a milestone in Mason Dixon's terminal expansion and modernization program. Within a single week, ceremonies marked the opening of identical buildings in Atlanta and Philadelphia. Built at a unit cost of $300,000, each had twenty-eight doors, a maintenance shop, an administration area, a driver's lounge and dormitory space to accommodate twenty-eight men.[47] By 1957, there were twenty-seven terminals in the Mason Dixon system. All had been expanded, modernized, or replaced at least once since the end of World War II.

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[46]"Truckers to Open New Facility Here," Chattanooga, Tennessee, Times, October 25, 1950, p. 26.

[47]"Mason and Dixon Lines Open Two New Terminal Buildings," Kingsport, Tennessee, Times-News, May 13, 1951, p. 5-A.

This new generation of terminals had been specifically designed and engineered for the task of handling motor freight since efficient terminal facilities are essential for the survival of a less-than-truckload carrier. Classification and consolidation of freight are costly and time-consuming activities.[48] If terminal facilities cannot accomplish the physical task of quickly and economically moving freight, customer service deteriorates and business is lost. The terminals which Mason Dixon erected after the war were both efficient and economical. In 1953, the American Trucking Association's Terminal Operations Council formally recognized the superiority of Mason Dixon's efforts in this area when an award was made for outstanding terminal planning and operation to Mason Dixon's Roanoke, Virginia, Facility.[49]

Fleet Replacement

It was fortunate for America's truck operators that vehicle manufacturers were able to shift rapidly their production lines from assembly of military equipment to commercial vehicles. There was a scramble in the immediate post-war period as truck lines sought to replace their badly deteriorated vehicle fleets. These problems

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[48]In 1957, Mason Dixon's terminal expenses, facilities and labor, were 36% of operating revenues. Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1958), p. 33.

[49]"Mason and Dixon Receives Award for Terminal," Roanoke, Virginia, Times, September 20, 1953, p. 41.

were generally resolved by 1948, and thereafter, replacements could be obtained on a regular basis.

Trucks in commercial service have a useful life ranging from two to three years to an indefinite number, depending on the level of maintenance performed. The truck operator must evaluate the trade-offs involved and decide whether to pay a high unit cost for preventative maintenance in order to achieve long vehicle life and reduced depreciation charges or to perform only minimal maintenance and plan to replace the vehicle when it requires major repairs. It is possible to find examples of truckers operating at all points between these two policy extremes. Mason Dixon's maintenance standards prior to 1957 were higher than was common throughout the industry.[50] Even so, it was necessary to replace tractors every four or five years. At the end of the war nearly all units needed to be replaced, consequently, in 1946, Mason Dixon added 114 new trailers and 40 new tractors to the fleet, bringing the total number of units to 43 from 283 operated the previous year.[51]

On April 14, 1947 operations north and east of Kingsport, Tennessee, were converted to a relay system. Under this plan, trucks were operated by a single driver. This conversion made the

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[50]Joseph E. Harvey in interview with the author, Kingsport, Tennessee, August 14, 1981.

[51]"Company Starts Recovery Program Soon After War," Kingsport, Tennessee, Times-News, September 20, 1957, p. 7.

entire fleet of sleeper cabs obsolete. As new equipment was ordered, the sleeping compartment disappeared.[52]

Throughout the early 1950s, vehicle pruchases were made to replace older equipment and to expand the size of the fleet. A 1952 purchase of 105 Mack tractors and 165 trailers cost $1.5 million.[53]

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[52]To be completely accurate, not all over-the-road equipment had the sleeping compartment attached to the tractor; some very old units had a small sleeping area in the nose of the trailer. Most drivers were less than enthusiastic about these trailer sleepers since they were hard to reach, rode more roughly than a sleeper cab, and lacked a communications link with the vehicle's pilot. It was this last condition that caused George Badger's adventure. Sometime during the early years of World War II, Badger and his partner were hauling a load of Mason Dixon freight through the Virginia mountains. They stopped at an all-night diner about midnight to eat and change drivers. It was Badger's turn to sleep, and being tired, he climbed into the trailer sleeper while his partner finished eating. Sometime thereafter Badger, awakened by the motion of his "bedroom," was alarmed by the absence of any engine or exhaust noise. The worst fear of all drivers was realized; he was in the trailer of a driver-less combination on a runaway trip down the mountain. In a panic Badger bailed out of the deathtrap, and clad only in his underwear, he trudged back up the mountain to notify his partner of the accident. Somewhat embarrassed by his lack of proper clothing, he knocked on the door of the diner rather than entering the public room. It was a waitress who answered his summons, and the embarrassed Badger hid in some nearby bushes. It took three tries before the male cook investigated the strange knockings. When Badger asked for his partner, the cook explained that the partner had paid his bill and departed some time before. Suddenly all became clear; the other driver, in an effort to avoid waking Badger with the loud starter noise, had simply let the truck roll a bit and accomplished a clutch start. By the time this happened, however, Badger was no longer in the trailer sleeper. For several months thereafter Badger was the subject of considerable good-natured kidding which he gracefully accepted. For a few moments at the time, however, there was nothing amusing about the matter. SOURCE: "Dreams Driver Missing, Jumps From Moving Rig," Nashville, Tennessee, Tennessean, November 12, 1950, p. 42-F.

[53]Picture caption, Transport Topics, October 27, 1952, p. 14.

Three hundred fifty new units were purchased in 1953 for an additional $1.75 million.[54]

Mason Dixon's conversion to diesel power in 1956 was a major equipment milestone. In that year, Virginia's State Legislature approved a 3,000 pound addition to the gross allowable weight. To achieve maximum potential benefit from this increased loading, the carrier needed more powerful tractors. Diesel engine equipment, in addition to having lower fuel costs and longer maintenance intervals than gasoline powered vehicles, had the additional advantage of extra power required to pull heavier loads over long hills. Mason Dixon ordered 225 White Cummins and twenty-five Mack diesels in 1956, at a cost of $2.5 million, converting the entire over-the-road fleet at one time.[55] The conversion was made in this manner to maintain standardization in the vehicle fleet; thereby minimizing maintenance training and spare parts inventory investment.

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MASON DIXON EQUIPMENT FLEET

Year	Tractors	Trailers
1951	312	545
1954	337	554
1955	372	608

SOURCE: TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, 1953), p. 63, 1954, p. 63; 1955, p. 69.

55"General Background About the Mason and Dixon Lines, Inc.," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1957 or 1958), p. 4.

Personnel Organization Re-building

Motor transportation of LTL traffic is a labor intensive-undertaking; that is, it requires the efforts of many people to sustain a trucking enterprise and these people's salaries constitute a major element of the carrier's operating expenses.[56] The war, in addition to causing deterioration in Mason Dixon's physical facilities, had depleted much of the firm's human resources. Trained personnel were lost to military service or were attracted to higher paying defense industries. Unskilled replacements were less productive and more accident-prone. At the end of the war, it was evident that a major recruiting effort was needed to rebuild the ranks of both labor and management. This personnel need was made particularly urgent by post-war conditions: increased traffic demanded more employees to maintain adequate customer service levels, and an increased degree of competition and complexity called for greater management skill.

One of the most promising sources of trained workers was the flow of returning servicemen who were former employees. Like most firms, Mason Dixon guaranteed to reinstate men inducted into military service by returning them to work and giving them full seniority. The company soon found that military service provided an excellent training background for entry level managers. Raymond L. Warren, longtime Director of Personnel, stated:

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[56]In 1948, salaries accounted for 49 percent of Mason Dixon's operating expenses. Source: "A History of the Mason and Dixon Lines,

> We got a lot of fine people coming out of the military as a lieutenant or captain who had good college backgrounds before going into the military. A tour of duty had sort of broadened that experience and then with our training program . . . they were ready to go out and be Assistant Terminal Managers or Platform Superintendents. From that point they could go to Terminal Manager and right on up to Vice President or whatever.[57]

Charles Hardesty was an example of such an individual, joining Mason Dixon as an ex-Navy pilot after the war and retiring as a vice president. In 1948, Hardesty had heard from a friend that Mason Dixon was a young and growing company that was trying to rebuild its personnel strength after the war, so he arranged an interview in Kingsport. Hardesty and Jack Dempsey got along right away. In a 1981 interview, Hardesty recalled:

> I came with the company and sure enough, they were growing like mad; there was such an economic need for this industry. I started getting acquainted with that type of work and continued to go up in the Traffic Department. Later I became Traffic Manager and eventually Vice President of Sales and Traffic.[58]

Ralph Baldock, one of The University of Tennessee's post-war Transportation graduates, went a step farther; he was named corporate Executive Vice President in 1978.[59] But when Baldock first interviewed,

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Inc.," unpublished manuscript, (Knoxville, Tennessee: Lavidge, Davis and Newman, Inc., 1963), p. 15.

[57]Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

[58]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[59]"Mason Dixon Announces Four Promotions," Kingsport, Tennessee, Times-News, January 11, 1978, page number unknown.

he wasn't sure he would even be offered a job.

> My situation was a little unique. I came up [to Kingsport]; I had an appointment with Mr. E. Ward King. At the meeting there was also Mr. J. B. Dempsey who was Vice President of Traffic, Mr. S. T. King who was Manager of Terminals, Mr. Jim Little, the company's tax accountant and Mr. A. E. Greene [Sr.], Vice President, Industrial Relations. It turned out to be much more of an interview than I was anticipating. They questioned me quite intensively about the material I had gone over when I got my degree in the Transportation Department at The University of Tennessee. Halfway through the interview I became quite embarrassed about it. I told them I hoped they realized I had been out of school and in military service for over four years and couldn't remember everything that had been presented in the courses.
>
> They laughed and that broke the ice. They told me that I was the first Transportation graduate from Tennessee that they had had an opportunity to interview and they wanted to learn all about the program. They had an idea during the war that they wanted to hire more college people in management training jobs. I happened to be the first [post-war] management trainee the company hired.[60]

To Ward King, education was a strong measure of a person's potential contribution to the company. In an article for The Rolling Reporter, he wrote that the success of Mason Dixon was due "primarily to brains, the brains of its employees."[61] An "Accent on Youth" program in the late 1940s and early 1950s was directed toward recruiting recent college graduates from Berea College, Duke University, Alabama, Georgia Tech., North Carolina, Washington and

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[60] Ralph E. Baldock in interview with the author, Kingsport, Tennessee, April 14, 1981.

[61] "Founder Tells of Early Days of the Company," The Rolling Reporter, January 1960, p. 5.

Lee, and other southern schools as well as from The University of Tennessee's Transportation program.[62]

This regard for education was unusual for a truck line owner at that time. Historically there has been an operations orientation throughout the transportation industry. This is particularly true in trucking. Motor carrier managers, themselves a product of this environment, were usually blind to the value of a college education in the trucking business and, consequently, often failed to benefit from the advantages educated employees could offer.[63]

By 1950, when Don Penland[64] was hired, a mutually beneficial relationship had been established between Ward King and Dr. Bill Way, developer of Tennessee's transportation curriculum. King needed a supply of talented recruits and Way needed to place his graduates in order to establish the program's credibility. By hiring Tennessee graduates, King made a major contribution to the establishment of The University of Tennessee as one of the nation's best known schools in the areas of Transportation and Logistics.[65]

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[62] Dave Garrison, "Mason Dixon Announces Several Personnel Changes," Southern Motor Cargo, April 1951, p. 32.

[63] This is an example of King's vision of the future. In the 1970s, motor carriers were actively recruiting college graduates. Experience had shown that education could be a valuable asset in managing a truck line.

[64] Vice President--Traffic in 1981 and a graduate of the Transportation program at The University of Tennessee, Knoxville.

[65] Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

During the post-war period, returning former employees were easily integrated into the organization, usually returning to their original positions. New employees, however, required training to bring them to an adequate level of productivity. With the rapid expansion in the size of the company's workforce, an employee training program needed to be developed. Vocational training for drivers and materials handlers was organized on a local level. Such local training programs had developed to the point that by the time a new terminal was erected in Knoxville, Tennessee, in 1966, one of the features was a large classroom designed for employee training and student programs offered in cooperation with The University of Tennessee.[66] Sales training for customer service representatives was on an apprenticeship basis with trainees assigned to work with experienced salesmen until they were ready to develop their own accounts.

For corporate staff and other management positions, the training program was irregular. If there was time and an available trainer, there was a program--otherwise people were assigned to trivial tasks. For example, when Don Penland joined the Traffic Department in 1950, his training consisted of auditing stacks of old freight bills.[67] Charles Hardesty, who had come to Kingsport

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[66]"A Narrative History of The Mason and Dixon Lines, unpublished monograph, (Kingsport, Tennessee: Industrial Relations Division of The Mason and Dixon Lines, Inc., 1975), p. 12-A.

[67]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

a year or so earlier, relates his training experience:

> When I first came here they had a training program; they didn't call it management training back then. The training program was basically a week back with the Chief Rate Clerk over here in the old terminal. We studied rates and so forth. We spent some time in the field. That was about all we had time for.[68]

Bill Popejoy was critical of the training program that he saw in the early 1950s:

> Ward King's relationship with [Professor] Bill Way was very good. Bill persuaded his best students to go with Mason Dixon when they graduated. Then they would go to Kingsport and sit them down with nothing to do for about a year, or send them to New York, which was Siberia. Boy, they wouldn't stay any time at all.[69]

Mason Dixon's post-war management training program produced virtually all the company's current executives. In keeping with the company's policy of making promotions from within the ranks of existing employees, it was necessary to maintain depth at each position to allow for transfers. "Every effort [was] made to keep the departmental management team at least three deep."[70]

7. POST-WAR MARKET DEVELOPMENT

After a decade of depression, and four years of wartime rationing, Americans had developed a strong desire to begin enjoying consumer

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[68]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[69]William Popejoy in interview with the author, Knoxville, Tennessee, November 11, 1980.

[70]Historical Highlights 1932--1967, The Mason and Dixon Lines, Inc., (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., 1967), p. 6.

goods and durables. Satisfying this demand required transporting millions of tons of goods to market. The growth in traffic was unlike any previously recorded. In 1946, a total of 904 billion ton-miles were moved by all modes; by 1957, this had grown to 1,336 billion.[71] Motor carriers obtained a disproportionately large share of this traffic increase, their share of the ton-mile market going from 9.1 percent to 19.0 percent over this period.[72]

Changes in the composition of the traffic and in the geographic structure of American markets accounted for the growth in the trucker's market share. Higher valued consumer goods demanded a higher level of service than was provided by the railroads, and truckers were able to meet the demand. Consumers, shopping facilities, and manufacturers were moving to the suburbs, often to locations where rail service was unavailable. Again trucks could meet the need.[73] Finally, the postwar highway reconstruction programs not only meant that trucks could reach more places, but also allowed them to operate at higher speeds, magnifying their service advantage over rail transport.[74]

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[71] E. Frederick Uhrbrock, Jr., The Motor Carrier Industry, (New York, New York: Bear, Stearns & Co., 1965), p. 9.

[72] E. Frederic Uhrbrock, Jr., The Motor Carrier Industry, (New York, New York: Bear, Stearns & Co., 1965), p. 9.

[73] T. M. Delaney, "An Objective Look at the Regulated Motor Truck Industry," mimeographed, W. E. Hutton & Company, February 1966, p. 3; and Marvin J. Barloon, "The Second Transportation Revolution," Harper's, March 1957, pp. 37-43.

[74] Charles A. Taff, Commercial Motor Transportation, 5th ed., (Cambridge, Maryland: Cornell Maritime Press, Inc., 1975), Chapter 2.

Many examples point to Ward King's recognition that marketing was a critical aspect of a truck line's success. He certainly understood the Marketing Concept and offered at least three of McCarthy's marketing mix elements: product (service), promotion, and price.[75] Ward King was perceptive enough to foresee a substantial increase in the dimensions of his company's market. His efforts to upgrade Mason Dixon's physical and personnel facilities are evidence that he planned to compete for traffic as it developed. His objective of increasing sales revenue was based upon two strategies: increased general rate levels and increased market share based upon improved service.

Although no individual firm could significantly influence motor transport price levels, the entire industry profited from postwar rate increases authorized by the Interstate Commerce Commission. There was an average general rate increase on East-South traffic of 12 percent in 1946;[76] two more increases, in March and December, 1947, totaled an additional 25 percent.[77] These rate increases provided much needed additional revenue to finance facilities improvements for Mason Dixon and other motor carriers.

"1948 was a record breaking year for the company. Business in all quarters was exceptionally good, and the usual seasonal slumps

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[75] E. Jerome McCarthy, Basic Marketing, 4th ed., (Homewood, Illinois: Richard D. Irwin, Inc., 1971), pp. 44-46.

[76] "Company Starts Recovery Program Soon After War," Kingsport, Tennessee, Times-News, September 20, 1957, p. 7.

[77] "Rate Increases, Relay System Appear After War," Kingsport, Tennessee, Times-News, September 20, 1957, p. 8.

were noticeably absent."[78] Traffic volume was 33 percent greater than in the previous year.[79] Operating efficiencies resulting from the terminal expansion and fleet modernization program produced lower operating ratios.[80] Earnings were advanced from 1947s $71,769 to $283,208. This is not to suggest that all problems had been resolved. Late 1948 saw the beginning of a major effort to increase market share.

> Although 1948 was a record year in respect to tonnage and revenue, certain conditions were revealed by the operations for that year, which clearly indicated that fast service had returned as a prime factor in selling motor service. Although we [Mason Dixon] had operated efficiently for the year as indicated by earnings, it was realized that in the return of a buyer's market, the company had not given sufficiently excellent service to ensure the retention of all its old accounts, or to secure new ones.
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> The competitive spirit among motor carriers was becoming intense, and it was realized that some inrodes on the company's business had been made by competing lines. It was, therefore, decided by the management that in 1949 the company would concentrate its full power and effort in rendering an unsurpassed, fast service, on which could be based an intense selling campaign to attract new business. This was in reality an intentional reduction in earnings, for the purpose of improving service.[81]

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[78]"1948 Was Record Breaking Year," Kingsport, Tennessee, Times-News, September 20, 1957, p. 8.

[79]"Comparative Profit and Loss Statement, 1938--1949," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., 1949), p. 1.

[80]Corporate records show operating ratios of 98.35 (1945), 95.78 (1946), 96.92 (1947), and 91.84 (1948).

[81]"1948 Was Record Breaking Year," Kingsport, Tennessee, Times-News, September 20, 1957, p. 8.

> During the first six months of the year [1949], the entire operation was reorganized to ensure that its service was the best available. The desired results were obtained, and the competitive advantage, in the matter of fast service, was radically increased. The Company considered the reduced earnings, due to increased costs of this type of operations, brought on by such a reorganization, were well worth the assurance that this volume would be maintained. Although the earnings for this period were well below normal, the last six months of the year proved the wisdom of this course of action. Although only $82,000 was earned during the first six months, the total figure for the year revealed net earnings of $236,000.[82]

By concentrating on improved customer service as a basis for its marketing program, Mason Dixon was following the conventional wisdom of the time. One of the first books to address the issue of motor carrier marketing stated the matter plainly: "Although the cost of transportation to industrial shippers is economically significant, service normally constitutes a carrier's most important sales and marketing variable." The authors continued, ". . . firms that fail to adopt the marketing concept and give top priority to their customers' needs usually fail to optimize their revenue/profit goals."[83]

Mason Dixon's postwar concentration on service improvements as the basis of its marketing program continued well into the 1950s. Service enhancement programs which sought to provide better

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[82] "History of The Mason and Dixon Lines, Inc.," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1957), p. 22.

[83] Grant M. Davis, Martin T. Farris, and Jack J. Holder, Jr., Management of Transportation Carriers, (New York: Praeger Publishers, 1975), pp. 148-149.

communication capabilities included linking all terminals with a leased line telephone network in 1951 and a radio dispatched local delivery fleet in 1956.[84] Service was broadened in 1955 with introduction of piggyback transport.[85]

Since damage-free movement is an important aspect of customer service, a claims reduction program was inaugurated in 1954.[86] Loss and damage reduction was a continuing effort at Mason Dixon, not only because of the customer service impact but also because claims constitute a severe drain on corporate profitability.[87] During the mid-1950s, Mason Dixon's goal was to maintain a claims-to-revenue ratio of under 1 percent. Actual performance approached but never achieved that goal.[88]

In the years following World War II, Mason Dixon's marketing program was centered around sales. The sales function was considered to be of such importance that in June 1949 it was split away from

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[84] "Highlights of History of Mason and Dixon Lines 1932--1961," unpublished corporate summary, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1961), pp. 1-2.

[85] "Piggy-Back Service Begins," Bristol, Virginia, Tennessean, November 14, 1955, p. 1.

[86] "Mason & Dixon Aims at 'Loss of Package' Problem to Cut Claims," Transport Topics, March 29, 1954, p. 24.

[87] Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[88] Claims-to-revenue ratios: 1953--1.54, 1954--1.09, 1955--1.14, 1956--1.16, 1957--1.14, 1958--1.22, 1959--1.26. Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., annual 1954 through 1960).

the Traffic Department and was given separate status under the direction of A. E. Greene, Jr.[89] The new Sales Department also was given responsibility for advertising and public relations.[90] The promotional material from that era consisted of routing guides and material designed to be distributed to Traffic Managers and institutional advertising in trade publications which promoted motor transportation and cheerfully criticized the railroads.[91]

Positive public relations were sought by publicizing Mason Dixon's safety and driving skill awards won by company drivers.[92] Another aspect of public relations was the lobbying effort carried on in state legislatures seeking increased gross vehicle weight limits. This effort was considered important enough at the time to be dubbed the "Fight for Survival."[93]

A final element of Mason Dixon's postwar marketing mix was the effort to introduce its Southern contemporaries to the benefits of a cost-of-service basis of rate making instead of the value-of-

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[89] "Mason and Dixon Lines, Inc., Promotes Greene and Everhart to Veep Posts," Transport Topics, September 17, 1951, p. 27.

[90] "A History of The Mason and Dixon Lines, Inc.," unpublished manuscript, (Knoxville, Tennessee: Lavidge, Davis and Newman, Inc., 1963), p. 15.

[91] "Watch Out, Boys . . . You're Being Railroaded!" Distribution Age, March 1956, p. 2.

[92] See Chapter IV for details.

[93] "Reviewing the Fifties in Every Phase," The Rolling Reporter, December 1959, p. 4.

service approach commonly practiced by the rate bureaus.[94] In the early 1950s, Mason Dixon was one of the first motor carriers to utilize the Chicago management consulting firm of A. T. Kearney, Inc.[95] Kearney developed a costing model which, although rudimentary and cumbersome, provided the basis for the cost-of-service pricing systems in use today.

8. CORPORATE REORGANIZATIONS: STRUCTURE AND LEADERSHIP CHANGES

As with other businesses, the economic, regulatory, technological, and competitive environment within which the truckline operator must function is constantly changing. Survival of any organization or organism requires adaptation to change. Due to the narrow profit margins characteristic of the industry, a company which is slow to change or takes incorrect management actions is often forced out of business. Ward King was successful as a strategic planner; thus, Mason Dixon survived and grew. King was able to recognize opportunity in developing trends and to organize his resources to seize that opportunity.

Chandler suggests that a firm's organization is structured so as to best achieve corporate objectives.[96] As the objectives

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[94]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[95]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981, and see pricing discussion in Chapter V.

[96]Alfred D. Chandler, Jr., Strategy and Structure: Chapters in the History of the Industrial Enterprise, (Cambridge, Massachusetts: The MIT Press, 1962), pp. 1-9.

and environmental conditions change, the structure will alter to accommodate these changes. Some changes are task related; that is, some activity needs to be performed, so the organization is altered to accomplish it. At other times, reorganizations deal specifically with personnel. In Mason Dixon's case there were resources available, the question was how could the responsibilities be structured so as to obtain the greatest benefit for the firm and the people involved? Mason Dixon's positive postwar adjustments fell into three general classes: 1) changes within the corporate organizational structure; 2) changes in operational methods; and 3) changes in personnel assignments at the leadership level.

Initially the Mason Dixon system was operated and managed as a single geographic unit. Considering the limited range and scope of operations, this was the most effective plan. As the company increased in size, both from the standpoint of volume of traffic carried and geographic territory served, it became necessary to adjust the corporate management structure. The first of these corporate reorganizations had come in 1938 when the Mason Dixon system was divided into two operating divisions: an Eastern Division managed by Nat Brounstein, previously head of Sales in New York City, and a Southern Division headed by Allen Day, Atlanta Area Sales Manager. Initially division responsibilities were assigned as an additional duty in conjunction with the manager's primary sales function.[97]

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[97]"History of The Mason Dixon Lines, Inc.," unpublished

In 1940, as the volume of traffic continued to increase, these two men were returned to full-time sales duties, and two men with operations experience, Gordon Johnson and A. A. Praff, were installed as Division Managers.[98] The two-division structure prevailed through the 1940s. There were periodic personnel changes, as in 1948, when F. L. Pierce was named Eastern Division Manager and George A. Maiden was promoted from Atlanta Terminal Manager to head the Southern Division.

The Carolina operation, closed during the war, was re-opened in 1948. Two years later, F. T. Stroud was named manager of a newly created Carolina Division which included all points of service in North and South Carolina as well as Roanoke, Virginia. The year 1950 saw further division of the system to keep pace with an increasing work-load. An East Tennessee Division was created, and the Eastern Division was split with F. L. Pierce retaining responsibility for the branches in New York state while Pennsylvania and Northern Virginia were assigned to J. B. Hahn. The East Tennessee Division contained only a few terminals in the Kingsport area and was managed as an additional duty by the corporate operations staff. S. T. King, Executive Vice President and Manager of Branches, continued to exercise overall supervision of the entire system of

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corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1957), pp. 8-9.

[98]"Spot News," The Mason & Dixon News, May 1940, p. 32.

terminals.[99] The purpose of these periodic reorganizations of the corporate structure was to divide the responsibility for operating managers into workable segments and to balance the workload of these segments.

A further modification of the corporate structure was undertaken in 1954. This step was really a continuation of the regional management reorganizations which had begun before the war. In this action, the entire system was divided into five divisions, each with a division manager responsible for operations, sales, and terminal activities within his geographic territory.[100] This five divisional structure remained in effect throughout the 1950s.

Successful completion of the regional conversion paved the way for implementation of a major change in corporate management policy. The purpose of this change was to place both authority and responsibility for management action at the lowest functional level within the company. The effect was to place a greater degree of

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[99] "History of The Mason Dixon Lines, Inc.," unpublished corporate document, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1957), pp. 20-21.

[100] Division I included Eastern Tennessee and Western North Carolina and was managed by various corporate staff personnel from Kingsport; Division II was Middle Tennessee and North Georgia and was placed under the supervision of George A. Maiden. Division III covered Central North Carolina and Middle Virginia and was managed by E. L. Tucker. J. B. Hahn was named Division IV manager and was responsible for all of New Jersey. Division V included operations in Western Pennsylvania and Baltimore, Maryland, and was managed by G. W. Young. Source: Robert C. Williams, "Joining the North and South," Southern Motor Cargo, December 1957, p. 30.

reliance upon the Regional Managers. On June 13, 1955, a reorganization was announced which would provide centralized planning at the Kingsport headquarters while requiring decentralized administration throughout the system. The structure that emerged from this management action was a concentration of staff agencies in Sales, Traffic, Claims, Accounting, Industrial Relations, and Personnel Training operating at the corporate level under the supervision of E. William King, Assistant General Manager. The five Regional Managers were responsible for Operations and Terminal Management within their territories and were to serve as a channel through which information, guidance, and special assistance could flow from the corporate staff to the fields. District Sales Managers also were assigned under district management.

The most important postwar operational reorganization was conversion to the relay system of driver dispatch. From the earliest days, Mason Dixon had conducted all over-the-road operations using two-man driver teams. This made sense for a company with limited points of service, a small fleet, and only a few employees. By assigning two drivers per vehicle and alternating driving, it was possible to obtain a high degree of vehicle utilization. Assignment of new drivers with an experienced employee provided an opportunity for an extended on-the-job training program. During the pre-war years, when labor costs were low in relation to equipment operating expenses, it was practical to pay two employees per vehicle. After the war, however, driver's wages rose in response to union demands and it became too costly to continue the team driver operation.

In 1947, conversion to a relay system in the Northern regions proved popular with all concerned. The drivers were pleased because they would be driving the same routes--one day out, the next day back--and would be able to be home more nights a week.[101] After a few months of resolving minor difficulties, the new system functioned well and resulted in substantial operating cost savings for the company.[102] Soon, the Southern half of the route structure also was converted to a relay system.

As vehicles became capable of higher sustained speeds and the highway system improved, it became possible to travel farther in the authorized ten-hour period. In response to these technological changes, the relay stations were moved farther apart. In January 1953, a new relay terminal was established at New Market, Virginia.[103] Contrary to the company's usual practice of building new facilities, this terminal was housed in a renovated antebellum Southern mansion.[104]

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[101] Emory Flemming in interview with the author, Kingsport, Tennessee, December 23, 1980.

[102] M. D. Hawk in interview with the author, Kingsport, Tennessee, August 19, 1981. As Supervisor of Drivers at the time, Hawk worked out the original dispatch schedule.

[103] "Local Firm Buys House in Virginia," Kingsport, Tennessee, Times-News, January 18, 1953, p. 7-A.

[104] It had been built in 1829 by Dr. John W. Rice, a surgeon who had served in the War of 1812. He had returned to Virginia to become a physician, planter, and person of local importance. The house served as Dr. Rice's family home and plantation headquarters through the mid-Nineteenth Century. Since it was located between the battle lines in the historic Battle of New Market, it had been hit numerous times by artillery charges. Source: "Mason and Dixon Opens New Relay Station," Virginia Highway User, 1953, p. 19. W. F. Kestner mentioned seeing two shells still embedded in the mansion's

After reconditioning for use as a relay station, the building housed a dormitory for sixty drivers, a lounge and game room, while outside there was parking space for one hundred vehicles as well as a shop and check-up facility.[105] This building was more than merely a part of the post-war effort to increase operational efficiency; it was photogenic and was prominently featured in Mason Dixon's promotional material. Eventually, however, progress forced movement of the relay point, and the house was sold in the 1960s.

The third category of post-war adjustments--changes in corporate leadership--had roots in one of E. Ward King's primary personal principles: to keep control closely held within the family. As is common in privately held businesses, Mason Dixon was family owned and controlled. When Roy B. Moore sold his interest, he was replaced, with regard to influence, by Ward King's brother, Stewart. Stewart T. King had a major positive effect on the development of the King family enterprise. While less in the public eye than Ward, Stewart worked as hard as any of the King family to promote corporate success. E. Ward King was unquestionably his own man and made his

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brick walls nearly 100 years after the battle. He also told of finding a cache of cannon balls that had been collected from the battlefield and stored in the house. Prior to Mason Dixon's purchase of the house plus an adjacent fifteen acres, the structure had been used as the Hines Children's Home of the Virginia Grand Lodge of the Knights of Pythias.

[105]"Mason and Dixon Lines Open New Relay Station," Virginia Highway User, 1953, p. 19.

own decisions, but he learned to seek out and trust the counsel of his younger brother. H. Jefferson Shivell, a personal associate of both King brothers for more than fifty years, thought most people greatly underestimated Stewart; that his influence, both personal and professional, was critically important to Mason Dixon's success.[106]

From an early date, E. Ward King adopted a policy of hiring the best management personnel available to resolve specific problems. W. D. McLain, Jack Dempsey, and A. E. Greene were all top men in their fields with regional or even national recognition before they became associated with Mason Dixon. Their expertise provided the foundation for the company's success during the first generation, but Ward King resolved to create the next generation of top managers from within the company.

There are essentially two sources of executive talent: external and internal. One school of thought holds:

> there's only one way to get good people who have the skills, experience and potential for future growth, and that's stealing them. Find who they are and make them an offer better than they're getting at their present job.[107]

The other personnel management philosophy holds that "floaters" (managers who change jobs regularly) won't be around long enough to do a great deal of good. If they are extraordinarily good, someone

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[106] H. J. Shivell in interview with the author, Kingsport, Tennessee, April 14, 1981.

[107] Cleo Crouch, <u>My Life on the Road</u>, (Hicksville, New York: Exposition Press, 1975), p. 265.

else will hire them away from you. One way to obtain both quality and stability in a corporate management team is to recruit the best available raw material and to provide in-house education and experience opportunities that will develop each individual's leadership potential. Finally, once these people are functioning at an effective level; recognition, responsibility, and rewards are necessary to retain them in the organization.

Ward King adopted the second philosophy and course of action. The degree of success of this policy may be measured by examination of the company roster of top managers over the past decades. Virtually all started with Mason Dixon when they were young and inexperienced, they have moved up within the company.

An excellent example of the success of the executive development program may be found in the grooming of the second generation of Mason Dixon's top executives. Ward King's sons, E. William (Bill) and John R. (Jack) King grew up with Mason Dixon. It was always clear that they were going to enter the family business. As boys, they played around the original terminal on Clay Street. Through high school, they worked summers and after school alongside the regular employees, learning the practical aspects of the business. At the end of the day, they met in their father's office where he would review his day's activities, explaining why a particular course of action was taken.[108] In this manner they became intimately

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[108]Margaret (King) Norris in interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

familiar with both the operational and managerial aspects of the company.

After military service, both entered college and, upon graduation, returned to full-time employment within the company. Through the mid-1950s, the two were enrolled in what amounted to an executive development program. Based upon their natural interests and abilities, they were assigned responsibilities within the company. Bill's expertise was financial administration and market development, while Jack was operations oriented. Each, with his special strengths, served to complement the other and create an efficient team.

It was generally understood throughout the company that E. Ward King's primary purpose in making Mason Dixon successful was to have something to pass on to his children and grandchildren. In 1957, the year of the company's twenty-fifth anniversary, operational control of the Mason Dixon Lines, Inc., was transferred: E. William King became President and Treasurer and John R. King became Executive Vice President and General Manager. E. Ward King and S. T. King were elevated to Chairman and Vice Chairman of the Board of Directors.[109]

At the end of 1957, Mason Dixon had gone through the first generation of corporate existance. It had grown to be the seventeenth largest common motor carrier in the nation proving that it could

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[109] "M-D Board Elects Officers," Kingsport, Tennessee, Times-News, March 23, 1957, page number unknown.

survive and prosper for twenty-five years in a very competitive business.[110]

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[110]"3 Men, 3 Trucks, Hard Work Wrote Mason-Dixon History," Transport Topics, October 20, 1958, p. 40.

CHAPTER IV

CORPORATE GROWTH IS NEW GOAL: 1957--1969

1. INTRODUCTION

Following the end of World War II, an annual meeting of Mason Dixon management personnel was held at Kingsport. The corporate staff, regional executives, and management representatives from each terminal were expected to attend. It was an opportunity for the corporate staff to introduce new management initiatives, to report the success of past programs and overall corporate performance, and to publicize goals for the coming year. These meetings were also an opportunity to give recognition to the achievements of Mason Dixon personnel. Social aspects were also important. It was an occasion for top managers, in frequent telephone contact with each other resolving essential operational and marketing problems over the year, to meet face to face.

In his 1958 keynote address to the annual meeting, President E. William King reported a 1957 revenue growth of 9.4 percent.[1] He stressed that accomplishments in profitability, safety, and company growth were the result of teamwork on the part of all seventeen hundred company personnel. After reviewing the accomplishments of the past, King turned his attention to the future. In this speech

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[1]"Optimism Highlighted Speech Delivered by E. William King at Opening of General Meeting," The Rolling Reporter, January 1958, p. 1.

King introduced a new corporate policy, not only for the coming year, but for an indefinite period. The primary corporate goal was to be growth.

King said:

> A business must progress and profit or lose its position in the business world and eventually disappear as a going concern. It cannot stand still for any length of time. If this were the case, the customers would notice, the competition would talk and confidence would be lost by you, the employees, the customers and the bankers who loan us money.[2]

In order to accomplish this growth, King added, "We must sell our service to new customers. We must give better service. . . ."[3]

King felt that Mason Dixon was in an excellent position to achieve growth.

> We have good and modern terminal facilities with efficient freight handling systems. A centralized freight billing system speeds the paperwork flow and contributes to higher levels of customer service. . . . A continuing program of procedures results in an increased freight carrying capacity. These advances, coupled with continued programs to concentrate on loading each trailer going over-the-road to its maximum is one way to control the operating cost per hundred pounds of freight transported. The secret is to set a goal then work toward achieving that goal.[4]

The Kings' strategy for achieving this desired growth would be based upon three elements; 1) revenue increase through territorial

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[2]"Optimism Highlighted Speech Delivered by E. William King at Opening of General Meeting," The Rolling Reporter, January 1958, p. 1.

[3]"Optimism Highlighted Speech Delivered by E. William King at Opening of General Meeting," The Rolling Reporter, January 1958, p. 1.

[4]"Optimism Highlighted Speech Delivered by E. William King at Opening of General Meeting," The Rolling Reporter, January 1958, p. 1.

expansion, 2) revenue increase through market penetration, and 3) revenue increase through diversification. A simultaneous effort would be made to control operating and maintenance costs. The net result was to be growth in corporate profitability.

2. REVENUE GROWTH THROUGH TERRITORIAL EXPANSION

The Atlanta, Knoxville, New York, and Eastern Pennsylvania route structure had been maintained profitably by Mason Dixon from 1942 through the end of the 1950s. The post-World War II period was used to modernize terminal facilities, expand and improve the vehicle fleet, and to develop competitive strength in the markets served. Table 4.1 shows that by the late 1950s these improvements were consistently producing profits for the truck line.

Table 4.1. Mason Dixon Financial Performance

Year	Operating Ratio	Earnings After Taxes	Return on Investment
1956	93.39	453,000	19 percent
1957	92.17	664,000	23 percent
1958	95.36	446,000	14 percent
1959	93.08	890,000	21 percent

Source: TRINC Transportation Consultants, TRINC's Bluebook of the Trucking Industry, (Washington, D.C.: TRINC's Transportation Consultants, Inc., Annual, 1957 through 1960).

E. Ward King's strategy for producing profits had been based upon market penetration. He sought to build revenue by capturing a greater share of his established East-South territorial market. His sons, the new corporate executives, sought to expand revenues by increasing the geographic scale of market coverage. In this strategy, the younger Kings were consistent with the views held by other truck line managers of that time.

Until the late 1970s, the greatest growth-producing activity engaged in by the leading American truck lines had been territorial expansion. Given the restrictive attitude maintained by the Interstate Commerce Commission, it was much easier to grow territorially by merger and acquisition of other operating companies than to obtain new operating authority. In summing up the industry's experience prior to 1968, the American Trucking Associations observed:

> The merger and acquisition activity in the trucking industry is without question contributing to the general shrinkage in number of motor carriers. It is also creating more and more giants in the industry.
>
> . . . .
>
> The growth trend by individual large carriers has resulted in gains for the carrier, the shipper, and the public. The greater financial resources available are permitting those carriers to mechanize their terminals, invest in more efficient vehicles, and to computerize their operations. (Also, the resultant stability of the individual firms has improved the image of the industry as a whole, as shown by increased public interest and confidence.) These efficiencies reflect themselves to the shipper in the form of faster and more reliable service, greater rate stability, and more importantly, the assurance of sufficient capacity by the carriers to handle the consistently growing freight volume generated by our burgeoning economy.
>
> . . . .
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> As early as 1956, the ICC in its annual report noted that its approval of proposals resulting in larger motor

carrier systems was based on findings that such unifications "are in the public interest."[5]

Mason Dixon's revenue growth strategy was primarily based upon territorial expansion through acquisition of other truck lines. The two primary criteria that made a potential acquisition attractive were a route structure that complimented Mason Dixon's and a low selling price.

Purchase of Robinson Transfer Motor Lines (1958)

The major item of corporate growth in 1958 was acquisition of Robinson Transfer Motor Lines, a family owned and operated tank truck company which also was headquartered in Kingsport, Tennessee. Robinson posessed common carrier irregular route authority to transport acids and chemicals, both dry and liquid, in bulk or in tank vehicles. With terminals in Chicago, Illinois; Charleston, West Virginia; Secaucus, New Jersey; and Kingsport; it served thirty-two states, mostly east of the Mississippi River[6] (see Table 4.2).

At the time of the purchase, August 1958, Robinson was much smaller than Mason Dixon and was only marginally profitable. The basic businesses of the two companies were vastly dissimilar. Robinson served relatively few clients, usually moved truck load quantities, and operated over a wide geographic area using two-man

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[5] ATA Current Report No. 21, (Washington, D.C.: American Trucking Associations, Inc., 1968), pp. 7-12.

[6] Hugh Penland, "Introducing the Mason Dixon Tank Lines," The Rolling Reporter, January 1959, p. 3.

Table 4.2. Financial Statistics for Mason Dixon Tank Lines

	Year	Operating Revenue	Operating Ratio
Robinson	1953	398	97.2
	1954	401	96.4
	1955	564	94.9
	1956	396	101.7
	1957	449	94.0
MD Tank Line	1958	844	95.5
	1959	1,405	94.6
	1960	1,605	95.1
	1961	1,961	94.8
	1962	2,292	93.4
	1963	2,617	91.3
	1964	3,112	91.9
	1965	3,512	91.4

Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., Annual, 1954 through 1966).

sleeper teams.[7] Mason Dixon, with its relay system and extensive terminal structure, was well established as a LTL carrier of general commodities. The Robinson acquisition was undertaken to allow diversification into new markets. There was no serious consideration of integrating these two operations. A separate subsidiary was formed and titled Mason Dixon Tank Lines. J. M. Shackleford, a Mason Dixon employee since 1935, was appointed General Manager.[8]

In this acquisition, the first since the Cumberland Freight Lines purchase in 1942, Mason Dixon's executives sought to accomplish two purposes: 1) to diversify into new markets where Mason Dixon's corporate reputation and operational skills could be employed and 2) to conduct a corporate experiment regarding growth through acquisition. This small purchase did provide increased market coverage and furnished valuable experience for future company acquisitions.

Silver Fleet Acquisition (1960)

The first major territorial expansion accomplished by Mason Dixon in the post-war period was acquisition of the operating rights, terminals, and equipment of Silver Fleet Motor Express, Inc., headquartered in Louisville, Kentucky. It is not clear whether this

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[7] Richard D. Eads, "Managing Specialized Carriers," Motor Freight Controller, February 1978, pp. 4-8.

[8] "M&D Promoted Officers of Subsidiary Tank Line," Traffic World, February 15, 1964, p. 46.

purchase was the result of a carefully thought-out plan or, as is more likely, came about when the Kings recognized the potential benefits of the opportunity and were willing to accept the risks and the challenge of accepting it.[9] The two truck lines were integrated within two years and the consensus of Mason Dixon's managers' comments during interviews suggests they have operated profitably ever since.

The two truck lines were similar in many respects. During the late 1930s, when E. Ward King was in the process of establishing Mason Dixon as a major East-South motor carrier, Edward J. Buhner was doing much the same thing in the Midwest with Silver Fleet.[10] Beginning operations in 1930, Buhner had built a route structure that by the post-war years extended from Chicago, Indianapolis, and Cincinnati on the north to Knoxville and Birmingham, Alabama in the South. Silver Fleet and Mason Dixon interlined freight in Knoxville, Tennessee, a common point of service. Ward King was well aware of Silver Fleet's progress. W. F. (Shorty) Kestner, a Mason Dixon employee since 1936 and a close associate of King's, recalled that during the late 1930s, King would make remarks such as, "If we ever become as successful as Silver Fleet, I'll be satisfied."[11]

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[9]In a 1981 interview, Donald K. Good, retired corporate Comptroller, stated his opinion that Ward King didn't really plan to buy Silver Fleet. It just became available and the owners of the two companies met and worked out a contract. Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

[10]"Big Capital Outlay," Virginia Trucks, February 1956, p. 25.

[11]W. F. Kestner in interview with the author, Crown Colony, Kingsport, Tennessee, February 12, 1981.

Like Mason Dixon, Silver Fleet was a family operation. Edward J. Buhner, the founder of the firm, served as Chairman of the Board. The Directors were all family members. Buhner's brother, C. J., was President and contributed to Silver Fleet's operation in much the same manner as Stewart T. King of Mason Dixon. The Buhner brothers were well-regarded businessmen and industry leaders.[12] The brothers, however, did not work together in operating Silver Fleet. Each wanted to be in charge.[13] While the brothers bickered, the truck line lost money.[14] By the mid-1950s this conflict reached such severity that there was little hope for future improvement. It became clear to the Buhner family stockholders that the wisest course of action would be to sell the truck line while it still retained some value. Silver Fleet went on the market. Consolidated Freightways, a western motor carrier that was rapidly acquiring an extensive system of operating rights throughout the nation, offered a purchase arrangement.

Consolidated's contract of sale provided that the transfer of ownership must be approved by the Interstate Commerce Commission and

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[12]Edward J. Buhner served as President of the American Trucking Associations, Inc.

[13]"That's why they [Silver Fleet] fell apart; the whole family was in there and all the terminals. Each operation was like a separate entity, in competition with each other." William Popejoy in interview with the author, Knoxville, Tennessee, November 11, 1980. Popejoy was a Mason Dixon salesman in Knoxville in 1960.

[14]"Better Profit Results Seen for Mason and Dixon Lines," Transport Topics, January 8, 1962, p. 11.

the transaction be completed within four years. In motor carrier acquisitions, it was common practice for the purchaser to obtain a Temporary Permit for Joint Operations to manage and operate the purchased line pending Commission approval of the sale. This case was unusual, as Consolidated Freightways did not apply for authority to operate Silver Fleet. The Buhners remained in command. With the sale virtually assured, there was little incentive for Silver Fleet's lame duck management to expend any effort to maintain a profitable operation. Donald K. Good, Mason Dixon Controller, recalled:

> One of the reasons that Silver Fleet went under faster, was because they didn't do anything while that [Consolidated Freightways] acquisition was pending and there was no reason for them to try to upgrade and modernize and do things that they would normally do. I think that drug [sic] on for a long time. Then the ICC turned the deal down and they had to start all over again.[15]

Apparently there was a general management attitude of apathy; do just enough to survive. Equipment fell into disrepair and was neither fixed nor replaced. No aggressive sales promotion campaigns were initiated. Terminal facilities were not modernized. Many management personnel, feeling they would not be retained when unification became final, sought employment elsewhere. As these managers left, they were either not replaced or the positions were filled by marginally qualified current employees. George Maiden,

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[15]Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

Mason Dixon's Southern Regional Manager at the time, stated that control of Silver Fleet's operational activities were taken over by unionized road drivers, and that they nearly drove the company into bankruptcy. Shipment pick-ups were ignored; drivers made their runs but carried no frieght; drivers left loaded trucks sit for days while they "vacationed" enroute.[16]

In the face of considerable opposition to Consolidated's purchase from other motor carriers, the ICC hearings took many months. Meanwhile, the once-prosperous Silver Fleet continued to deteriorate. Finally, the four-year time limit specified in the original purchase agreement expired and still the Commission had not reached a decision. Consolidated Freightways withdrew their offer.[17]

By then, the Buhners felt compelled to seek an immediate sale. Silver Fleet's management problems were contributing to increasing operating losses and there seemed little chance that conditions would improve. See Table 4.3. In mid-1959 the Kings began to negotiate with the Buhner family for purchase of the distressed operation.

Mason Dixon's interest centered primarily around obtaining additional operating authority into the Midwest. In 1958, Mason Dixon had filed an application with the ICC to expand its routes as far north as Louisville, Kentucky.[18] A year later this application

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[16]George A. Maiden in interview with the author, Kingsport, Tennessee, July 24, 1981.

[17]"Consolidated Freightway's Jumbled Empire," Business Week, June 11, 1960, p. 62.

[18]As Donald W. Penland later recalled, "We hadn't asked to go

Table 4.3. Silver Fleet Financial Statistics

Year	Revenue	Expenses	EAT	Ratio	Worth	ROI
1953	3974	4084	(130)	102.8	620	(.21)
1954	3888	4014	(142)	103.2	429	(.33)
1955	4424	4496	(83)	101.6	346	(.24)
1956	4637	4608	13	99.4	359	.04
1957	5018	4998	27	99.6	386	.07
1958	5050	5159	(136)	102.2	251	(.54)
1959	5012	5157	(185)	102.9	65	(2.58)

Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., Annual 1954-1960).

was still pending and faced lengthy hearings due to the number and intensity of protests. With operating rights that extended from Birmingham and Knoxville through Louisville to Chicago, the Silver Fleet acquisition offered the Kings a much more valuable and extensive Midwestern route structure than they would have obtained through the original application.

Another useful route segment possessed by Silver Fleet that would fit profitably into the Mason Dixon system was the authority to serve Alcoa-Maryville, Tennessee, from Knoxville. At that time all traffic carried by Mason Dixon to or from the Aluminum Company of America's facility in Alcoa, Tennessee, had to be interlined with Robinson's Transfer, a local Knoxville carrier. Associated Freight Lines, a prime competitor, had Alcoa authority. This ten-mile route was considered by Ward King to be important because it allowed Mason Dixon to match Associated's service.[19]

Silver Fleet's operating rights represented a significant improvement in revenue generating potential. Martin Long, a Mason Dixon executive of forty-four years service, stated, "one of the good things about the Silver Fleet purchase was we got into the

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to Chicago at that time because we knew that there would be overwhelming opposition [from other carriers] and we'd never get it granted. When Mason Dixon agreed to purchase Silver Fleet we just asked the ICC to set aside the Louisville application." Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[19]William Popejoy in interview with the author, Knoxville, Tennessee, November 11, 1980.

Midwest--rates were better up there than on East-South traffic.[20,21]

In order to generate revenue, however, traffic had to be moved; and that was not happening. Silver Fleet's marketing strategy had been to concentrate on large accounts to provide a core flow of traffic.[22] Two such major accounts were Alcoa Aluminum and Haas.[23] As the quality of customer service declined, some large shippers withdrew their business.[24]

On June 16, 1960, final negotiations were completed and the Kings agreed to purchase Silver Fleet, subject to Interstate Commerce Commission approval.[25] Temporary Operating Authority was approved

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[20]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[21]In a 1981 interview, retired Vice President--Operations and Marketing, Charles D. Hardesty, said, "The North-South rate structure, Central Southern, and East-South rate structures are sub par structures. The Eastern Central is a little more lucrative, the Midwest and Transcontinental are very lucrative. Fact. That came about as a result of the Commission selecting what they call "frame carriers." All requests for a rate increase were evaluated according to operating ratios of these frame carriers." Hardesty went on to explain that the administration of this system favored rate increases in some territories and worked against them in others. He concluded that this unsatisfactory situation has been relieved in recent years by a change in Commission policy and more recently by deregulation. Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[22]A. B. Bell, Jr., in interview with the author, Powell, Tennessee, March 26, 1981. Bell was Division I Manager at the time of the Silver Fleet purchase.

[23]Haas is a Louisville, Kentucky based cabinet manufacturer.

[24]Haas, for example, established a proprietary fleet operation which exists today.

[25]"We Expand! Purchase Silver Fleet," The Rolling Reporter, June 1960, p. 1.

effective July 23, 1960,[26] and the task of integrating the two systems commenced.

Operationally, Silver Fleet had deteriorated to the point of collapse. In 1956 the Buhners purchased $1.25 million worth of new trucks and trailers,[27] but by 1960, "Silver Fleet had broken-down [sic] equipment scattered all over the system--in terminals and in garages. They couldn't pay to get them out."[28] One Mason Dixon executive made an inspection tour of the Silver Fleet terminals. He reported, "The Decatur, Alabama, operation was unbelievable. They would go for days and never move a pound of freight."[29]

The King family paid $2,060,000 for 5,562 miles of operating authority, 14 terminals, and the remains of a vehicle fleet.[30] While five of the terminals were at points already served by Mason Dixon, (Kingsport, Knoxville, Chattanooga, and Nashville, Tennessee, and Asheville, North Carolina)[31] the remaining facilities established a presence in five new states (Alabama, Illinois, Indiana, Kentucky, and Ohio).

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[26] "ICC Grants Temporary Authority to Operate Silver Fleet," The Rolling Reporter, July 1960, p. 1.

[27] "Big Capital Outlay," Virginia Trucks, February 1956, p. 25.

[28] William Popejoy in interview with the author, Knoxville, Tennessee, November 11, 1980.

[29] Ralph E. Baldock in interview with the author, Kingsport, Tennessee, April 14, 1981.

[30] "Only One Name Now--It's Official," The Rolling Reporter, February 1964, p. 1.

[31] Mason Dixon Press Release, Kingsport, Tennessee, July 24, 1961.

In the five cities where duplicate terminals were located, the better facility was retained and all operations were consolidated in one location. The remaining nine Silver Fleet terminals were included in Mason Dixon's 24-hour telephone system.[32] It would have been premature to undertake an extensive program of terminal construction in the Midwest prior to the Commission's approval of the sale. By 1963, however, with tentative approval having been obtained, a new terminal was opened in Cincinnati, Ohio. The following year, new terminals were constructed in Louisville, Kentucky, and Birmingham, Alabama.[33]

In the spring of 1961, ICC hearings were in progress to consider permanent approval of the Silver Fleet purchase.[34] Some of the protesting parties questioned Mason Dixon's ability to operate Silver Fleet in an efficient manner.[35] That question was succinctly answered by E. Ward King's report of the first year's operation: "I suppose we should be happy with our accomplishments as this company [Silver Fleet] lost almost $600,000 in 1960, and we were able to show a profit of over $300,000 in 1961."[36]

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[32]Mason Dixon Press Release, Kingsport, Tennessee, July 24, 1961.

[33]"Purchase of Silver Fleet Completed," The Rolling Reporter, November 1963, p. 1.

[34]"First Part of Silver Fleet Hearings Completed," The Rolling Reporter, December 1960, p. 4.

[35]"Examiner Recommends Approval of Control of Silver Fleet by Mason and Dixon Lines," Traffic World, July 15, 1961, pp. 86-87.

[36]"E. Ward King Outlines Growth Factors at Regional Meetings," The Rolling Reporter, March 1962, p. 1.

Looking back on the period when Silver Fleet was being integrated into the Mason Dixon system, E. William King remembered that it had taken almost two years to complete the transaction.[37] This lengthy process may have been due to the deplorable condition of Silver Fleet in 1960 and in part to the Mason Dixon executives' inexperience in accomplishing the task of merging operations and control systems with such a sizable acquisition. Later acquisitions went more smoothly.

As had been the case with Consolidated Freightways' proposal to purchase Silver Fleet, there was vigorous opposition to Mason Dixon's application to acquire the company. Other carriers serving the Midwestern market did not want to see Silver Fleet regain strength and return to competition. In the face of such well-managed opposition, the ICC held numerous and lengthy hearings before making a final decision. It took more than three years for the Commission's approval to be obtained. Finally, on September 25, 1963, the two operations were legally joined. By that time most of the operational problems had been resolved.[38]

Mason Dixon's Acquisition Strategy

Ward King knew Silver Fleet was a truck line that was in poor condition. He felt that the most economical policy was to acquire

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[37] E. William King in interview with the author, Kingsport, Tennessee, August 11, 1980.

[38] "Silver Fleet Merger with Mason Dixon Lines Approved by ICC Action," Alabama Trucker, January 1964, p. 12.

a financially distressed line at low cost and then develop its profitability.[39] As exemplified by the Silver Fleet purchase, Mason Dixon never attempted to purchase a healthy, high-value company. This policy was based upon two premises. First, highly profitable truck lines were seldom for sale. Second, King knew that in the process of integrating two established systems, one must emerge as dominant. When restructuring personnel, procedures, and lines of communication and control, one system must prevail, the other be abandoned. And, although change is difficult, it is no more difficult to change a poor operation than a good one. Ward King saw little sense in paying a premium price to acquire a well-run truck operation when the management system that had made it successful was to be replaced by Mason Dixon procedures. Similarly, there was little point in acquiring a vehicle fleet that did not integrate into Mason Dixon's fleet management and maintenance system. Mason Dixon acquisitions have always been valued for the operating authority obtained rather than for the quality of the physical plant or of the management structure.

Another of Ward King's policies regarding acquisitions was to make them pay their own way rather than be subsidized by Mason Dixon.[40] The first order of business was to make the Silver Fleet

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[39]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[40]W. F. Kestner in interview with the author, Crown Colony, Kingsport, Tennessee, February 12, 1981.

operation into a profitable enterprise. The transformation began by applying the fleet replacement and terminal modernization prescription employed by Mason Dixon during the previous decade. In 1961, 107 trucks and 204 trailers[41] were purchased for the Silver Fleet operation at a cost of approximately $4 million.[42] All over-the-road dispatching was transferred to Kingsport in order to maximize equipment utilization.[43] These management and equipment improvements allowed Silver Fleet to be profitably operated in the years immediately after it was acquired. Operating ratios for the separately operated Silver Fleet division were 110.91 in 1960; 93.79 in 1961; 96.39 in 1962; 94.15 in 1963; 95.07 in 1964; and 95.58 in 1965.[44]

Volunteer Motor Lines Purchase (1965)

As a river crossing point, Memphis, Tennessee, is a major east-west gateway for motor freight traffic. Mason Dixon sought to extend its operating authority from Nashville to Memphis in 1950.[45]

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[41] "Order for Silver Fleet Purchase Received," The Rolling Reporter, August 1961, p. 1.

[42] E. Ward King, "Summary of 1961," The Rolling Reporter, January 1962, p. 3.

[43] "ICC Grants Temporary Authority to Operate Silver Fleet," The Rolling Reporter, June 1960, p. 1.

[44] TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., Annual, 1960 through 1966).

[45] "ICC to Hear MD Petition," Kingsport, Tennessee, Times-News, September 17, 1950, p. A-2.

Gaining these rights would offer a competitive advantage in solicitation of east-west traffic. Plans to open a Memphis terminal were announced in 1951,[46] but due to protests from other carriers in the market, the ICC did not grant the requested extension.

The next strategy was to purchase the desired authority. Arrangements were made to buy Sartain-O'Guin Motor Lines, Inc., a small truck line with Memphis to Nashville, Tennessee, authority. A Temporary Operating Permit was obtained, but after hearings the ICC denied Mason Dixon's purchase request and the company was ordered to divest itself of Sartain-O'Guin.[47]

Mason Dixon sought to circumvent the ICC's order and retained control by making only the appearance of a sale. Investigations of Control conducted by the ICC in 1957 and 1958 concluded that under the ownership of Clifford E. Sanders and Edwin O. Norris,[48] Sartain-O'Guin was being operated in common interest with Mason Dixon in violation of the law and subsequently Mason Dixon was ordered to terminate its control of Sartain-O'Guin.[49]

Sartain-O'Guin was then sold to W. J. Still of Kingsport, Tennessee. Still renamed the operation Volunteer Motor Lines.

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[46]"Approval of Mason-Dixon Terminal in Memphis Will Mean New Route," Kingsport, Tennessee, Times-News, September 25, 1951, p. 10.

[47]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[48]Edwin O. Norris was E. Ward King's son-in-law and a prominent Kingsport, Tennessee, attorney.

[49]"Prior Findings in Motor Control Case Affirmed, Different Order Entered," Traffic World, April 26, 1958, p. 92.

Little was changed, however, except the name. Volunteer continued in the manner of Sartain-O'Guin, serving as an interline carrier for Mason Dixon.

In 1963, Mason Dixon again sought ICC permission to purchase and operate Volunteer Motor Lines. The Hearing Examiner noted in his report that market conditions were changing.

> The continuance of its [Volunteer's] operation as a separate undertaking depends almost entirely upon the amount of interchange it may continue with the vendee [Mason Dixon] and Silver Fleet, since other carriers are reluctant to enter into such arrangements because of existing competitive situations.
>
> Most of the former carriers with operations in the same area here, through mergers and other proceedings, become part of the system of other carriers with more extensive operations.[50]

For a reported $155,000, the book value of the company, Mason Dixon received sixty-three vehicles, shop and garage equipment, operating rights, and the Nashville and Memphis terminals.[51] The Commission also approved Mason Dixon's application to continue to operate Volunteer's intrastate routes serving Memphis, Nashville, Jackson, Lexington, Henderson, and Saltillo, Tennessee. Final approval of the purchase was granted by the ICC in December 1965.[52] The Volunteer name was immediately dropped and the two firms'

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[50] "Examiner Approves Mason & Dixon Plan to Purchase Volunteer," Traffic World, May 6, 1964, page number missing.

[51] "Examiner Approves Mason & Dixon Plan to Purchase Volunteer," Traffic World, May 6, 1964, page number missing.

[52] "Mason Dixon Wins Purchase Approval," Transport Topics, December 27, 1965, p. 3.

operations, marketing, and accounting systems were integrated. The transition went more smoothly than had earlier consolidations due to 1) the relatively small size of Volunteer, 2) its limited route and terminal structure, and 3) the closeness with which the two firms had operated for an extended period of time.

With the Silver Fleet and Volunteer acquisitions completed, Mason Dixon extended its routes through the two primary river crossing points, Memphis and Louisville, in its area of operation. The last acquisition of this period, Yankee Lines of Ohio, strengthened the carrier's market coverage in the Middle Atlantic states.

Acquisition of Yankee Lines (1969)

Yankee Lines, Inc., headquartered in Akron, Ohio, had been founded in the 1930s by Howard Rodgers, a former Pennsylvania Railroad freight agent. By 1968, it had grown to a six thousand mile system which reached from Ohio through Pennsylvania, New York, New Jersey, West Virginia, Maryland, Delaware, Virginia, Kentucky, and the District of Columbia.[53] Although Yankee had both general and special commodities (steel) authority, they were known primarily as a dry goods hauler.[54] Yankee, a privately held (family) corporation was operated by Rodgers, and his son and daughter. With advancing age, Rogers was unable to play a major role in the truck line's operation

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[53] "Purchase of Yankee Lines by Mason and Dixon Okayed," Traffic World, December 21, 1968, p. 65.

[54] Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

and his children lost interest in continuing the enterprise. A decision to sell was reached, with one of Rodgers' requirements being that the purchaser must be another family operated carrier. His reasons centered on his loyalty to Yankee's employees. He felt that thay would receive better treatment with a family operation than from a publicly owned corporation.

The Kings viewed Yankee's route structure as a nearly perfect fit with their existing authority. The original East-South routes formed one side of a triangle; the Midwest-South routes obtained through the Silver Fleet purchase formed another. Yankee's East-West authority formed the final side of the triangle and closed the figure. The Yankee purchase would increase the value of Mason Dixon's operation by allowing complete geographic coverage of the heartland of America's industrial region. Agreement in principle was reached between the Kings and Howard Rodgers in late 1968. On January 20, 1969, temporary authority was issued by the ICC for Mason Dixon to purchase, operate, and manage Yankee Lines. The Yankee shareholders were to receive a total of $3,100,000.[55]

There was no substantial opposition to the consolidation, so "final approval from the Interstate Commerce Commission was not delayed," indicating the Commission's feeling that the transaction

[55]"Purchase of Yankee Lines by Mason Dixon Okayed," Traffic World, December 21, 1963, p. 65.

would be, "generally healthy for the transportation industry and specifically beneficial for the two carriers involved."[56]

Of Yankee's thirteen terminals, only five were located in cities not already served by Mason Dixon. These new locations were Wilmington, Delaware; and Akron, Cleveland, Mansfield, and Sandusky, Ohio.[57] Other terminals were consolidated with existing Mason Dixon operations. Yankee's general commodities authority was integrated into Mason Dixon's operation. Under management of Ralph E. Baldock, the special commodities branch operation was moved to Kingsport and became the basis of the Special Commodities Division of Mason and Dixon Lines, Inc.[58]

3. REVENUE INCREASE THROUGH MARKET PENETRATION

The decade of the 1960s was a period of prosperity in the American economy. This was particularly true for the motor carrier industry. At the end of the decade, the American Trucking Associations reported:

> In 1948, Class I, II and III motor carriers earned $2.6 billion in gross revenues. By 1958 this total had climbed to $6.1 billion and shot up to $11.1 billion in 1967. This figure is expected to climb to $23,5 billion by 1980.
> Trucking's outstanding growth can be attributed not only to concurrent growth in the entire national economy, but

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[56]"Yankee Becomes Mason Dixon," The Rolling Reporter, February 1969, p. 1.

[57]"Mason and Dixon Gains East-West Operation," Traffic World, January 25, 1969, p. 30.

[58]Ralph E. Baldock in interview with the author, Kingsport, Tennessee, April 14, 1981. In 1983, Ralph Baldock was named Chief Operating Officer of Mason Dixon.

also to the fact that truckers, with their tremendous flexibility, have been used in more and more business and industry operations.[59]

Motor transport has been competing with railroads for market share since the end of World War II, and in 1962, regulated motor carrier freight revenues exceeded those of the Class I railroads.[60]

Mason Dixon was growing, too. Management's overall growth goals were a 5 percent annual increase in operating revenue[61] while maintaining an operating ratio of 95 or less.[62] Revenue growth was the result of increased market penetration, territorial expansion, and diversification. By 1963, the three main operating units of the Mason Dixon family, Mason Dixon, Silver Fleet, and Mason Dixon Tank Line, had combined operating revenue of $35.692 million.[63] This ranked the company the fifteenth largest common motor carrier in the nation.[64]

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[59]American Trucking Assoications, Current Report No. 21, (Washington, D.C.: October 1968), p. 6.

[60]John V. Lawrence, "The Growth of an Industry," The Highway User, December 1963, p. 12.

[61]E. Ward King, "Summary of 1961," The Rolling Reporter, January 1962, p. 1.

[62]"How Are We Getting Along This Year?" The Rolling Reporter, September 1965, p. 1.

[63]TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1964), pp. 30, 31 and 75.

[64]"A History of the Mason and Dixon Lines, Inc.," unpublished manuscript, (Knoxville, Tennessee: Lavidge, Davis and Newman, undated but probably 1964), p. 20.

Marketing Programs Stress LTL Growth, Balance

The purpose of a territorial expansion program is to increase revenue. The Silver Fleet and Yankee purchases were major contributors to Mason Dixon's corporate development. Another element of the King growth strategy was to increase operating revenue through market penetration. This tactic was accomplished by two programs: 1) expanding the volume of LTL traffic carried and 2) achieving greater directional balance. These programs were made well known to Mason Dixon employees. When he was Knoxville Terminal Manager, A. B. Bell, Jr., remembered:

> We had objectives on revenue, we had more revenue than tonnage you know. We had revenue objectives all the time and sales quotas and operating ratio objectives and, of course, we had budgets. And growth, we always wanted to grow.[65]

Part of the Mason Dixon growth strategy was the assumption that increased profits would be the natural result of expanded operating revenue. The main thrust of Mason Dixon's marketing programs through the mid-1960s was to carry more freight and take in more revenue. As late as 1962, Ward King was stating growth goals in terms of increased operating revenue, rather than increased profit because, ". . . with efficient operations and an active sales effort, we should be able to produce a nice profit."[66] At the time

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[65] A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

[66] "E. Ward King Outlines Growth Factors at Regional Meetings," The Rolling Reporter, March 1962, p. 1.

this strategy was sufficient, because as A. B. Bell, Jr., noted, ". . . in the early 60s it seemed like almost anything you could haul would make you money. But then, as time passed, your costs were coming up more and more traffic became unattractive, from a money standpoint."[67]

Progressive motor carrier managers were beginning to shift their marketing emphasis to seek profitability rather than sheer volume. George H. Boggs, a former auditor for Mason Dixon, wrote of his own observations as an investment banker:

> Middle sized motor carriers [otherwise defined as the carriers with annual operating revenues between $20 million and $50 million] are struggling for freight and taking unprofitable cargo. There's a big difference between soliciting unprofitable "cats and dogs" freight and merely accepting it when it comes your way. Too many truckers, in my opinion, are going after "everything" to increase their volume, trying to bring profits upward. The great number of top managers at middle sized carriers are not as cost-oriented as they should be.
>
> Of course, cheap low-rated freight is profitable to some operations because it provides some revenue on a back-haul that otherwise might be deadhead. Sometimes cheap freight is profitable for load balance.[68]

Another industry observer, Everett Martin, saw the same problem and provided a prescription for improvement:

> Since more revenue and higher rates are becoming increasingly difficult to achieve, it becomes more and more the burden of the operating departments to find more efficient

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[67] A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

[68] "A Banker Looks at Trucking," Fleet Owner, January 1966, p. 79

> procedures and equipment. They must accomplish this without impairing service. . . .
>
> Cost squeezing can go just so far without impairment to service, hence risking customer irritation leading to possible customer loss. Efficient methods and equipment are reaching a plateau of development.[69]

Martin's answer to these challenges was to seek to balance LTL flows by selecting traffic and placing particular marketing emphasis on building volume on the weak side of an imbalanced traffic lane.

Nat Satterfield, marketing manager for a southern truck line, wrote a decade later on the profit potential of LTL traffic:

> Obviously more labor is involved with LTL, but this is more than offset by the increased revenue. A solid trailer load moving from Nashville to Charlotte, N.C. will generate some $350 in revenue compared to a trailer carrying 75 shipments with a total tariff of $850 to $900. . . . carriers who in the past had moved away from LTL shipments in favor of truck load volume have swung back to LTL.[70]

Mason Dixon sought to improve profitability through development of LTL traffic flows. While there is no recorded statement from a corporate official announcing a shift in policy, there is clear evidence that beginning in the mid-1960s, Mason Dixon placed greater marketing emphasis on traffic with a high profit potential. In 1962, an Add-A-Market campaign was designed not only to bring shippers' attention to the increased operating territory brought about by the Silver Fleet purchase, but to generate new traffic which

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[69] Everett F. Martin, "Trucking's Final Profit Barrier," Trucking Business, March 1965, pp. 15-16.

[70] Nat Satterfield, "Tennessee Carolina Transportation Unveils New Freight Sales Program," Southern Motor Cargo, November 1974, p. 8.

would ease directional imbalance.[71] A Fast Service program in 1963 and Royal Route Service the following year were intended to build LTL volumes, particularly over heavy routes, those defined as royal routes:

> ROYAL ROUTES put emphasis on certain points in our system for LTL traffic. This does not mean that we do not want profitable LTL traffic to all other points as well; this is simply a plan to get freight between points to which consistent service is available.[72]

This increased awareness of the benefits of LTL traffic should not be interpreted as an indication that the company had previously ignored the potential of such traffic. A. B. Bell, Jr., stated:

> We have always hauled both LTL and truckloads. I'm not sure that we didn't swing a little in favor of truckloads, especially on the local level. But more and more it showed that revenue was better on LTL.
>
> In the beginning we weren't too definite on the mix of freight that we had but as we got more into Marketing there was more emphasis on quality. From the middle 1960's on, it really stated coming to the fore, quality LTL.[73]

Charles D. Hardesty, at one time Vice President in charge of Operations and Sales, provided a similar perspective:

> There really hasn't been a change in philosophy or policy, only in the degree to which we have tried to implement that philosophy. We stepped up our efforts when we realized that what we wanted wasn't happening. We weren't growing in LTL as fast as we needed to grow. So, at different times over the years we have campaigned.
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> We had different programs to build traffic but I can't see any real change in philosophy.

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[71] "Add-A-Market Service New 1962 Promotion," The Rolling Reporter, January 1962, p. 4.

[72] "Royal Route Service Introduced," The Rolling Reporter, February 1964, p. 1.

[73] A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

> Consider this company; we have built terminals everywhere possible, we have added terminals as we expanded. That's only because of LTL freight. They are dedicated to LTL traffic. Since the war Mason Dixon has dedicated about 90 percent of its brain power, capital and facilities to handling LTL traffic. Hell, we don't need all these people around here [at Corporate Headquarters in Kingsport] to handle TL operations. We could get rid of this whole building and handle ten times the truckload business we have now. It's all LTL oriented and always has been.[74]

The market and operational strategy which emerged in the 1960s was directed toward development of a specific traffic mix. This mix consisted of both large and small shipments. It also possessed directional balance. Donald W. Penland agreed that Mason Dixon was traditionally an LTL carrier:

> We have always had a large amount of LTL traffic, numbers of shipments and tonnage. The system was built to accommodate that. Excess equipment and capacity we could devote to truckload freight.[75]

Charles D. Hardesty was certainly the originator of modern marketing at Mason Dixon. He explained the concept of development of a traffic mix:

> There are basically three kinds of traffic. The solid load, relatively low grade, high volume, single shot stuff. Then you have your LTL, that's truckload stuff that takes the terminal facilities. Then, there's a segment of traffic that's neither LTL nor truckload. It's what we call headers, maybe two-thirds of a trailer. Say, 20,000 to 30,000 pounds. It may move under truckload rates but you still got 10,000 pounds of room on your trailer.

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[74]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[75]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

> The header traffic and LTL compliment each other beautifully. The truck load is strictly under its own set of circumstances and pulse. But you may mix your headers and LTL and you can move really full loads. We always realized that our economic feasibility was primarily the LTL because that is where we could do an outstanding job.[76]

Recognition of an objective and communication of that objective to those in the field is necessary but not always sufficient for attainment of that goal. One of the problems that Donald W. Penland saw in this regard was:

> We have given more lip service than effort in a lot of cases to development of LTL traffic. We recognized that we needed to develop the LTL business, and have made various stabs at it, but there is a certain intrigue, a magic and interest in large numbers. It is much more interesting for a salesman to work on a movement of a million pounds a month than it is for some less-than-truckload traffic. It has been very difficult to keep interest focused on the LTL business. We have gone through cycles of trying to do that. We have recognized the need to develop the LTL traffic because it isn't subject to nearly the competition that truckload traffic is. It is also higher rated. We have recognized the need to focus on the more profitable part of the business but the need to develop a lot of tonnage and a lot of dollars has, somtimes, much of the time, conflicted with that.[77]

Another objective that is constantly sought by all modes of transport is to balance directional flows of traffic. Mason Dixon owes much of its early success to E. Ward King's development of southbound express to fill up backhauls. The Silver Fleet and Yankee acquisitions complicated the balance situation by adding

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[76] Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[77] Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

additional traffic lanes which required backhaul traffic development. "We did better when we were just a North-South carrier," commented A. B. Bell, Jr.[78]

Contrary to Mason Dixon's experience, the addition of new operating authority has been beneficial to some operations. Cleo Crouch, one of the founders of Crouch Bros., a Midwestern truck line, told how one of their early acquisitions helped solve a problem of traffic imbalance.

> Before acquiring the Park Davis authority, we could run all the meat we could carry from the St. Joe area up to Chicago. But there wasn't much freight coming from Chicago to St. Joe. We were running out of balance; we couldn't match southbound traffic to northbound freight. Opening a wider authority meant we had many more destinations near St. Joe we could service with Chicago freight, giving us enough southbound freight to match our northbound meat runs.[79]

While Mason Dixon's growth objectives were reflected in both marketing and operational activities, evidence suggests that the market appeal was based upon superior service rather than attempting price competition. "Our sales job was always made easier because there was the right kind of base upon which to operate," said Martin M. Long, Director of Claims. "Our service, for the most part, has always been good if not outstanding. That's what it takes to sell successfully.[80]

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[78]A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

[79]Cleo Crouch, My Life on the Road, (Hicksville, New York: Exposition Press, 1975), p. 178.

[80]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

Service Not Price: Successful Rebating Defense

One of the goals of Congress, when it passed the Motor Carrier Act of 1935, was to minimize the degree of price competition in the motor carrier market. Through the mechanism of carrier's regional rate making bureaus, most common carriers in a geographical area participated in a uniform schedule of charges published in each bureau's tariff. While individual carriers were authorized to publish their own tariffs which deviated from the uniform prices, in practice, few truck lines took advantage of the opportunity.

However, there have always been more subtle ways to engage in competition. In one common practice, known as "bottle of booze routing," the carrier's sales representative periodically rewarded an industrial Traffic Manager with gratuities, often a bottle (or case) of liquor, for routing some portion of outbound traffic via that particular carrier. While such a practice is theoretically illegal, it has assumed the role of a traditional sales technique with many carriers.[81] Additional gratuities may involve providing unbilled services, providing services not authorized in the tariff, and rebating.[82]

[81]A 1966 survey of motor carrier freight salesmen conducted by Warren Blanding, editor of Carrier Salesman, concluded, ". . . competitive tactics in entertainment and gift giving are much more effective in getting traffic than genuine rate and service competition." Reported in "Field Selling," Sales Management, September 15, 1966, p. 130.

[82]Rebates are cash refunds made by a carrier to a shipping customer. This practice is strictly prohibited by law.

The Interstate Commerce Commission has maintained a high degree of vigilance in their efforts to curb such abuses. Although many Mason Dixon salesmen gave small gratuities to assure the goodwill of their customers, major deviations from the intent of the law were strictly prohibited. Ward King did not believe in buying freight:

> He didn't believe in rate cutting to get business. He believed in collective rate making procedures and then sticking with those rates and not cutting them. He would get quite upset with our traffic people from time to time when he found out that we had cut the rate to get a certain movement.[83]

King was understandably upset when, in 1959, the Interstate Commerce Commission named Mason Dixon and thirteen other Southern motor carriers and their customers in a suit charging that they had granted unauthorized concessions to shippers, unlawfully extended credit, paid warehousemen for storage of customers' freight, and/or granted outright rebates. All other firms named in the suit pleaded no contest and were assessed more than $130,000 in fines and penalties.[84] Mason Dixon's executives felt that while there was a difference of opinion on the matter of interpretation of the tariffs in question, there was no prohibited activity being practiced by the firm.[85] Mason Dixon stood alone in challenging the charges,

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[83]George A. Maiden in interview with the author, Kingsport, Tennessee, August 10, 1981.

[84]"Trucking Firm Wins Acquittal," Charlotte, North Carolina, News, October 13, 1959, p. 3-A.

[85]"Mason & Dixon Lines Acquitted of Charges of Textile Rebating," Transport Topics, October 19, 1959, p. 15.

and in September 1959, they were cleared of wrongdoing by the U.S. Federal District Court in Charlotte, North Carolina.[86]

4. REVENUE GROWTH THROUGH DIVERSIFICATION

The process of accomplishing business growth may employ either or both of two strategies: present operations may be expanded or new enterprises entered. Market penetration is an example of the former, while territorial expansion contains elements of both strategies. Both growth patterns are found regularly in the trucking industry. However, expansion into areas unrelated to the over-the-road business, ". . . appear to be the exception rather than the rule for truck operators."[87] Mason Dixon was one such exception. The Kings used profits from their trucking operations to finance ventures into other markets.

Truck lines diversify into unrelated business enterprises for the same reasons as other businesses; to spread economic risk, to assure continuity of service, and to take advantage of discovered opportunity. Most motor carrier diversification is into areas ancillary to the trucking activity: fleet leasing, real estate and terminal development, and maintenance and supply provisioning.[88]

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[86] "Company Cleared in ICC Suit," The Rolling Reporter, October 1959, p. 1.

[87] Frank Rathje, "Diversification, Money and You," Trucking Business, October 1965, p. 26.

[88] Frank Rathje, "Diversification, Money and You," Trucking Business, October 1965, p. 26.

Truck line owners will often organize subsidiary corporations to own and supply operating equipment and terminals. This not only utilizes available investment capital but removes certain activities from the regulatory purview and scrutiny of the Interstate Commerce Commission.[89]

E. Ward King saw opportunity in satisfying needs for more than merely motor transportation. As the chain of Tennessee Valley Authority lakes were developed in the late 1940s, King foresaw a demand for powerboats and other water recreational items. To meet this demand, he organized a ChrisCraft boat dealership in Kingsport. Also in the late 1940s, Mason Dixon began to require hundreds of new vehicles each year. King determined that he could obtain the most favorable terms on trucks and repair parts if he purchased them through his own dealership. Motor Sales, a King-owned White Truck dealership, was established. Earlier, Holston Auto Parts had been started for much the same reason, to assure the supply of repair parts needed to maintain the Mason Dixon fleet.

E. Ward King farmed. He bought and sold farms. Out of these activities he came to control extensive real estate holdings. One of these parcels he felt was a good site for a golf course. When King could not obtain an adjacent parcel of land necessary to have enough area for eighteen holes, he abandoned the idea and used the site to develop Crown Colony, an innovative housing project.[90]

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[89]Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

[90]Margaret (King) Norris in interview with the author, Crown Colony, Kingsport, Tennessee, April 16, 1981.

Ward King's greatest diversification undertaking was Southeast Airlines. Operated from 1957 to 1960, Southeast was an intrastate passenger carrier designed to link Upper East Tennessee with the rest of the state. King sought but failed to obtain interstate operating authority from the Civil Aeronautics Board. This, in turn, denied the airline revenues from interstate traffic and air mail contracts. With insufficient traffic for the scale of the operation Southeast steadily lost money and ceased operations in August 1960.

Southeast Airlines was a costly experience for King. He lost an estimated $2.5 million of his own money.[91] Perhaps an even more bitter personal disappointment was that one of his ventures had been a spectacular and public failure. This experience did not cause the Kings to cease their expansion plans. Even while Southeast Airlines was winding down its operation, the King family had been negotiating for purchase of Silver Fleet Motor Express.

5. PROFITS INCREASED THROUGH OPERATIONAL MANAGEMENT

Effective marketing can increase operating revenues; effective operational management is necessary in order to retain a share of these earnings and produce a profit. The first critical step is achieving cost control. This, in turn, involves developing an accounting methodology which can determine the critical elements

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[91] Historical Highlights, 1932--1967, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., 1967), p. 9.

of expense and output. The president of a New Jersey contract carrier observed:

> The key to running a profitable trucking firm is cost accounting. We've got to pin down our costs so we know the profitability of various operations. Our business is highly competitive and requires constant analysis.[92]

A managerial cost accounting system can not only identify those areas which offer the greatest cost reduction potential, but also quantify the degree of effectiveness of management improvements. Mason Dixon was one of the first motor carriers to attempt this approach seriously. Donald K. Good, corporate controller at the time, recalls:

> In the early 1950s, A. T. Kearney Co. of Chicago [management consultants] came down and worked with us on a cost formula. They took all our costs and allocated them on the basis of a formula. That was a manual type thing and hard to change as your costs changed. It was the first time we got into something like that.[93]

Charles D. Hardesty was working in Traffic and was closely involved with these early cost studies.

> This was really new at the time so far as motor carriers were concerned. They thought they [A. T. Kearney] had a real good system. The only thing was that you had a hard time going back to the source for your numbers. When we got to a rate case, it was difficult to prove where your figures came from.
>
> What they [A. T. Kearney] did was take our figures and make certain assumptions based on their own engineering studies in order to allocate the line haul costs. We

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[92] Daniel C. Will, "Cost Accounting in the Trucking Industry," Modern Office Procedures, July 1974, p. 59.

[93] Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

> eventually evolved into use of another formula that was developed by the ICC where you went back and used your original individual account data and brought it forward. It got to where that was the only thing that was acceptable at ICC hearings. I don't think it produced any more accurate figures, but you could identify where the numbers came from. . . .
>
> This market research is one thing I'm particularly proud of in that the whole phenomenon in our industry was born and developed in my lifetime here. Mason Dixon was one of the first. We were absolutely the first carrier in the country to have cost accounting; a cost [accounting] capability. Cost allocation where we could actually cost our traffic. Look at different segments of our business and know what we were doing instead of just going out and hollering for freight. To know what this piece of freight would do for us, or to us, and how they compared. We only did that because of the wisdom of Mr. E. Ward King, who realized that we needed to know what we were doing. Our business, even then, was complicated; so complicated in cost allocation techniques with so many variables that it was unreal. . . .
>
> I remember distinctly when I would go to rate meetings, we were in there deliberating rate proposals, increase proposals, etc., and I had a little edge on all my colleagues because I had some idea of what some of these things would do for us from a cost/earnings relationship. . . . We started this in the 1950s, then really accelerated our own capabilities. I think we have developed a very sophisticated system of cost analysis, lane analysis, and shipment analysis. We know what this traffic really does for us.[94]

Once a managerial cost accounting system was in place to track results, specific programs designed to improve cost effectiveness could be evaluated. Major programs which proved to be effective were in 1) vehicle maintenance, 2) terminal construction and fleet modernization, 3) claims reduction and safety, and 4) computer applications.

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[94] Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

Fleet Maintenance Contributes to Corporate Profits

In the years that followed World War II, Mason Dixon had a strong preventative maintenance policy.[95] E. Ward King, as a result of his early training and experience as a mechanic, was persuaded that preventative maintenance was best in the long run.[96] Consequently, a feature built into all major terminals constructed in the post-war period was an inspection lane where vehicles were checked after each run and minor difficulties corrected. The company's reputation for reliability of service, a feature which figured prominently in their marketing effort, was heavily dependent upon the reliability of the equipment fleet.[97]

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[95] William Popejoy and Fred Green in interview with the author, Knoxville, Tennessee, November 11, 1980.

[96] Equipment maintenance is a critical element in the operation of all truck lines. The maintenance process begins with the company's procurement of new units. Specifications must be drawn to assure that the new vehicles will operate efficiently, wear well, possess ease and economy of repair, and be compatible with other equipment in the fleet. All these factors must be obtained at a competitive cost. Equipment which fails to meet these criteria will produce an adverse effect on the company's operating ratio and net income.

Once the vehicles are in the system, a maintenance policy must be adopted which minimizes the maintenance cost-per-mile. One of the two extremes such a policy can take is to operate with a minimum level of maintenance, making only safety related repairs. Savings in parts, labor, and vehicle out-of-service time are offset by shorter vehicle life, reduced trade-in value, a nd more frequent breakdowns.

The opposite extreme favors an active preventative maintenance program with periodic inspections, lubrication, and scheduled component replacement. The cost of such a program is an investment which pays back in reduced repair cost and higher customer service levels associated with reliable transport.

[97] "This Month's Equipment Superintendent: W. F. Eaton," Diesel Equipment Superintendent, January 1963, pp. 20-23.

Mason Dixon's preventative maintenance program was cost effective. The company's 1959 and 1960 profits were largely due to vehicle maintenance savings. At the 1959 General Meeting, E. William King established a revenue goal of $20 million for Mason Dixon's 1959 operations. "That mark looked high in January, doubtful in July, possible in November and was met in December.[98] John R. King, Executive Vice President, gave credit for this accomplishment to the company's employees who, through hard work, teamwork and determination made the success possible. Not only was revenue increased over 1958 levels by 14.8 percent, but the operating ratio was decreased by a dramatic 2.44 points to 93.11. King credited Mason Dixon's vehicle maintenance activity with making the greatest single contribution to this increase in effectiveness.[99]

Revenues in 1960 were $20.5 million, scarcely more than had been generated in 1959. This flattening effect could be attributed to a general decline in the growth rate of the national economy, to the strike in New York City and Secaucus in December 1960, and to reduced traffic brought about by increased competition from other truck lines.[100] Profits for the year declined 25 percent compared

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[98] "Review of '59 and Preview of '60 Given by John R. King," The Rolling Reporter, January 1960, p. 1.

[99] "Review of '59 and Preview of '60 Given by John R. King," The Rolling Reporter, January 1960, p. 1.

[100] "J. R. King Reports in Detail on 1960 Operations," The Rolling Reporter, January 1961, p. 2.

to 1959 levels due to a sharp increase in expenses. An even weaker showing was once again prevented by savings in vehicle maintenance. Conversion in 1959--60 to tubeless tires and the amortization of these longer-lived assets over a greater time period resulted in the bulk of the financial savings.[101] Frank Eaton, director of the system's maintenance and repair operation, received well-deserved industry recognition when he was awarded Fleet Owner's 31st Annual Maintenance Efficiency Award in 1960.[102]

It was during the early 1960s that Mason Dixon's maintenance philosophy moved toward reducing the amount of preventative maintenance performed on the fleet. Joe Harvey, Director of Maintenance, stated specifically:

> As far as greasing, changing oil and filters, we are 100 percent on preventative maintenance. Grease and oil are cheap when you consider the kind of money it takes to repair a burned out bearing or universal joint.
>
> We are down the middle, we don't go all out 100 percent like Rider used to do. They brought one in at so many thousand miles and completely disassembled it. That's a waste to me. It's like going to a hospital and having exploratory surgery--just to see if there's anything wrong with you. . . . You get in there tinkering around and darned if you won't mess up more than you fix. We say, "If it's not broke--don't fool with it." . . . .
>
> We don't bother a truck if the engine's running right, if the horsepower is up there and the oil consumption is all right.[103]

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[101]"J. R. King Reports in Detail on 1960 Operations," The Rolling Reporter, January 1961, p. 2.

[102]"Top Maintenance Award Won," The Rolling Reporter, November 1961, p. 1.

[103]Joseph Harvey in interview with the author, Kingsport, Tennessee, August 14, 1981.

Joseph Harvey stressed the importance of equipment procurement in effective maintenance.

> When we went to diesels we were trying to cut down on the nit picking with points, and condensers, and spark plugs. Of course, it had higher horsepower, too. But the biggest thing was that maintenance down-time was less and the cost was less. Our experience with the first Cummins [diesel] we had wasn't that good but we were still a lot better off than when we were running gas. We had some problems but we still made money with those tractors where a lot of people didn't.[104]

Not all equipment innovations proved successful, however. Harvey continued:

> Brown came out with a lightweight trailer and we bought 200 of them. They looked good on paper but they wouldn't haul freight. They wouldn't stand up. . . . It doesn't do you much good to cram [a trailer] full of freight if you are going to spend all the money in maintenance to keep the thing on the road. Our experience with lightweight [equipment] got us into trouble. Got the industry in trouble.[105]

Since the mid-1960s, Mason Dixon's fleet maintenance philosophy has been to procure equipment which requires less scheduled maintenance and to reduce the planned levels of preventative maintenance. The vehicle maintenance branch has been able to contribute to cost reduction programs while not sacrificing fleet reliability.

Terminal Construction and Fleet Modernization

The terminal expansion and modernization program which had

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[104] Joseph Harvey in interview with the author, Kingsport, Tennessee, August 14, 1981.

[105] Joseph Harvey in interview with the author, Kingsport, Tennessee, August 14, 1981.

been in progress since the end of World War II continued throughout the 1960s. As traffic increased, it became necessary to improve the system's physical facilities in order to maintain customer service levels and to control materials handling costs. With the addition of new operating authorities, it became imperative that acquired terminals be compatible with facilities in the rest of the system.

As the scale of the carrier's operation expanded, it became evident that the Kingsport terminal and maintenance shops were becoming outmoded. Since there was no room for expansion at the Eastman Road location, a search was instituted to find a suitable site for placement of a new and larger facility. Late in 1961, an 85 1/2 acre tract located just outside the Kingsport city limits on Highway 11W was purchased.[106] The property provided ample room for future expansion, allowed excellent access to the major highways serving the Tri-Cities, and avoided the congestion and high taxes associated with a metropolitan location.

The following spring, construction commenced on a new maintenance shop and combination Tri-Cities/break bulk terminal. The new freight terminal was constructed at a cost of $2.5 million and replaced smaller facilities at Bristol, Kingsport, and Johnson City, Tennessee.[107] Serving as a break bulk point to divide the

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[106]"Major Expansion Plans Announced by Mason Dixon--Silver Fleet," The Rolling Reporter, January 1962, p. 1.

[107]"Mason & Dixon Shows Press $2.5-Million Automated Freight Terminal Center," Traffic World, April 25, 1964, p. 56.

northern and southern portions of the original East Coast route system, the new building had a 128 door loading platform. Kelly dock leveling devices were used at each station to allow for various types of equipment. The new facility also employed the latest dragline conveyor and materials handling equipment.[108] The maintenance complex was intended to provide major repairs and machine work for the entire Mason Dixon/Silver Fleet system.[109] These shops were advanced for the time and featured in such trucking publications as Commercial Car Journal and Fleet Operator.[110]

Construction of these two major projects took over a year. The Tri-Cities terminal was opened formally on Labor Day, 1963, while the more complex maintenance and transportation facility began operations in December, 1963. Prominently displayed over the main entrance were life-sized figures of Generals Grant and Lee, shaking hands, a symbol so long a part of the company logo.

In September 1965, a completely new terminal and maintenance shop replaced the original Silver Fleet headquarters complex at Louisville. This 46-door structure cost in excess of $135,000 and was designed to serve as a division point in the Western route

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[108] "Our Company's History," The Rolling Reporter, December 1975, p. 4.

[109] Jim Luther, "Mason-Dixon Opens New Facilities," Johnson City, Tennessee, Press-Chronicle, April 15, 1964, p. 1.

[110] "New Shop Geared for Fast, Line-haul Turn-around," Commercial Car Journal, June 1964, pp. 80-93.

structure, much the same as Kingsport in the East. As a division terminal, it was required to provide a broader range of services than the enroute locations. The Louisville maintenance area, though not as large as the Kingsport shop, had four check lanes, two service lanes, a lubrication area, driver's comfort facilities, a canteen and a locker room. In the decade between 1959 and 1969, in its efforts to control the cost of handling freight shipments, Mason Dixon rebuilt, remodeled, or replaced twenty-four terminal facilities. Table 4.4 shows that during this period, terminal expenses as a percentage of gross operating revenues remained fairly constant. Terminal expenses as a percentage of LTL revenue, a more meaningful statistic, showed a steady increase from 31.7 percent in 1959 to 40.8 percent in 1969 indicating that the company's cost reduction efforts were not completely successful.

In conjunction with their extensive terminal modernization program, Mason Dixon continued to expand and upgrade the capacity of the vehicle fleet. Considering the poor condition of the physical facilities obtained in the Silver Fleet purchase, the first order of business in 1961 was to initiate a fleet replacement and modernization program for the Silver Fleet system. Most of the 1961 purchase of 625 tractors and trailers was used for this purpose.[111] The $4 million spent for new equipment in that year was a record purchase for the

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[111] "Large Fleet Replacement Made at Mason Dixon--Silver Fleet," The Rolling Reporter, September 1961, p. 4.

Table 4.4. Mason Dixon Terminal Costs Compared to Revenue

Year	Operating Revenue	LTL Revenue	Terminal Expenses	% Operating Revenue	% LTL Revenue
1969	55,584	28,268	11,525	20.7	40.8
1968	46,033	25,941	9,839	20.4	37.9
1967	40,053	22,928	8,374	20.9	36.5
1966	39,313	22,255	8,291	21.1	37.3
1965	36,016	20,850	7,700	21.4	36.9
1964	33,810	20,907	7,371	21.8	35.3
1963	32,358	20,566	7,097	21.9	34.5
1962	31,434	20,171	6,643	21.1	32.9
1961	Silver Fleet data missing for 1961				
1960	25,285	15,818	5,367	21.2	33.9
1959	20,511	13,003	4,124	20,1	31.7

Source: TRINC Transportation Consultants, <u>TRINC's Bluebook of the Motor Carrier Industry</u>, (Washington, D.C.: TRINC Transportation Consultants, Inc., Annual 1960 through 1970).

company.[112] In February 1962, Mason Dixon began receiving the largest (up to that time) post-war order made from the Mack Truck manufacturing company. In a single transaction, 200 conventional B67T single axle diesel tractors and 55 tandem axle models were purchased.[113] As state weight limits were gradually increased, it became necessary to replace single axle tractors with the heavier duty tandem axle model. One hundred seventy-six of these replacements were obtained in 1963 and a like number of single axle units were retired.

Equipment purchases in 1964 were minimal, but the next year, Mason Dixon spent $2,669,505 on 95 Great Dane dry freight trailers, 25 Converta-van trailers from Trailermobile, and 20 stainless steel tankers from Fruehauf. A mix of 85 dual and single axle tractors were ordered from Mack. The city fleet was augmented with 154 Ford and GMC pickups.[114]

The combined family of trucking operations, The Mason and Dixon Lines, Inc., and Mason and Dixon Tank Lines, had a total fleet of 772 tractors and 1009 trailers in 1966.[115] In that year, $4.7 million was spent on rolling stock: 99 40-foot over-the-road trailers, 79 tandem axle tractors, 108 single axle tractors, and 42 pickups were procured for the freight operation while 35 sleeper-cab tractors,

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[112] E. Ward King, "Summary of 1961," The Rolling Reporter, January 1962, p. 1.

[113] "Mason & Dixon Places Mack's Largest Single Postwar Order," Transport Topics, January 21, 1963, p. 3.

[114] "Mason and Dixon Purchase Equipment," Virginia Trucks, April 1965, page number unknown.

[115] TRINC Transportation Consultants, TRINC'S Bluebook of the

14 non-sleepers, and 6 new trailers were integrated into the Tank Lines fleet.[116] That year most of the over-the-road tractors were ordered from International Harvester, and all were diesel powered.[117]

The equipment shopping list for Mason Dixon's operation in 1967 included 102 Mack diesel tandem axle tractors, 104 Mack single axle tractors, and 74 GMC pickups. The bill came to $3.6 million. Over $1 million was also spent to obtain 20 Mack sleeper cabs and 41 tank trailers to the Tank Line.[118] Sleeper cabs were employed in the tank line operation because the original operating authority had been expanded to authorize irregular route operations throughout the forty-eight contiguous states. As a consequence, tank line vehicles regularly operated far from Mason Dixon's established terminals. This type of operation made two-man driving teams with sleeper equipment the most practical combination.

The bulk of 1968's $5 million equipment budget was spent to increase the cargo carrying capability of the trailer inventory. Two hundred and thirty-eight Monon trailers in 45-foot lengths, 131 40-foot Gindy open tops, and 45 Strick Converta-vans were

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Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1967), pp. 110, 227.

[116]"John R. King Gives Review of 1966 and Preview of 1967," The Rolling Reporter, March 1967, p. 1.

[117]"Annual Mason and Dixon Truck Order $4 1/2 Million," Kingsport, Tennessee, Times, April 21, 1966, page number unknown.

[118]"John R. King Gives Review of 1966 and Preview of 1967," The Rolling Reporter, March 1967, p. 1.

purchased. The city fleet received twenty-three new Ford straight trucks.[119]

Scheduled for delivery beginning in March 1969 were 211 Mack and 50 Ford tractors for the general commodity operation and 24 White tandem sleeper-cabs for the tank line. A total of just over $5 million was invested in 1969 in trucks, trailers, and other transportation equipment.

The importance of the vehicle fleet to a motor carrier is obvious. Over the decade the company spent about 10 percent of its gross revenue on the purchase of new vehicles. These new vehicles were not only replacements but increased the size of the fleet as traffic volume increased. New vehicles also reflected changes in technology--more power or greater economy, regulatory structure--larger trailers following increases in allowable weight, or changes in corporate target markets--refrigerated vans, flatbeds, or tank trailers. In this as in other areas of management, Mason Dixon's executives were able to pursue a policy of making rapid adjustments to satisfy changing requirements.

Advances in Operations Management

Most carriers are operations oriented as opposed to market oriented. An early Transportation textbook noted, "For some reason, carriers seem to fall into the serious error of stressing operating

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[119] "Company Growth Marked by New Terminals, Equipment," The Rolling Reporter, June 1968, pp. 1-2.

convenience at the expense of customer convenience."[120] As a result of this operational orientation, the primary profit-building technique employed by nearly all truck lines is to make operational improvements; but to cut operating costs rather than solicit higher revenue producing traffic.

The basis for this operational orientation is that since most truck line operators began their careers as drivers they are familiar with that aspect of the company. In this respect, E. Ward King was unusual; he never drove a truck.[121] King was essentially a businessman whose business was trucking, not a trucker who prospered and had to learn business. The managers and executives King recruited after World War II were of his type--university graduates and businessmen--people who were already familiar with business and management techniques, people who could learn about trucking.

This is not to suggest that the company failed to seek operational improvements. On the contrary, Mason Dixon was an early adopter of many management actions designed to increase productivity. Use of radio controlled city dispatching in the major urban markets and conversion to diesel power in the 1950s; the claims reduction program initiated in 1959;[122] and installation of tow-veyor systems in most

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[120]Hugh S. Norton, Modern Transportation Economics, Second Edition, (Columbus, Ohio: Charles E. Merrill Publishing Company, 1971), p. 195.

[121]E. William King in interview with the author, Kingsport, Tennessee, August 11, 1981.

[122]"Mason & Dixon Moves to Eliminate Causes of Slight Claim Rise," Transport Topics, March 30, 1958, p. 18.

of the terminals constructed in the 1960s are examples of management improvements. By the late 1960s, however, most of the easy advances had been implemented. Richard N. Farmer, an industry observer and academic, noted in a 1966 article that motor carrier managers were constantly seeking to achieve the maximum profit opportunity through application of existing technology. He predicted:

> It is unlikely that any really far-out changes will occur in this industry in the next twenty years. . . . [Therefore,] trucking is a game of inches and ounces. Nothing spectacular happens, but the combination of many seemingly minor improvements results in major cost savings over a decade.[123]

Two examples of Mason Dixon's application of Farmer's philosophy are seen in their efforts to achieve better vehicle utilization through loading management and their program to reduce claims expense through operations management and the driver safety program.

It should be clear that the more cargo loaded on a trailer, the more revenue generated. One must avoid loading so much that the vehicle weight allowance is exceeded; however, that is seldom a problem for the predominantly LTL carriers, as their loads fill the cubic capacity of the trailer before they exceed the weight limit. Due to the heterogeneous nature of most less-than-truckloads and the wide variety of the packaging methods used, it is an art to fit all the odd-shaped and sized pieces into a compact, solid load. LTL

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[123] Richard N. Farmer, "The Motor Trucking Industry," Business Horizons, Fall 1966, p. 8.

carriers have maintained continuing programs to motivate cargo handlers to seek maximum loading. In terms of efforts to increase unit loads, Irving F. Trawick, Mason Dixon's Director of Terminal Operations, said,

> The current maximum loading campaign was launched May 20th. The plan was designed to decrease out-of-balance transportation costs, to facilitate more efficient use of equipment, to give better customer service, and to allow increased shipping flexibility by freeing additional trailers.
>
> For the week prior to the start of the campaign (week ending May 17th), the company load average per trailer was 29,108 lbs. After only one week the average had risen to 31,311 lbs., and for the week ending May 31st, the average had climbed to an impressive 32,193 lbs. In terms of additional revenue per trailer with no increase in transportation costs, the extra weight for the week ending May 24th was worth \$36.57. For the week ending May 31st, the increase was \$50.28 per trailer.[124]

A second operational area to receive continuing management attention was operator training and accident prevention. The benefits of an efficient safety program are 1) reduced loss and damage of freight in-transit, and therefore, reduced costs associated with administration and payment of claims, 2) increased reliability of service through minimization of accident-related delay and damage of shipments, and 3) higher revenues brought about by the carrier's reputation for offering highly reliable service.

Ward King quickly recognized the economic significance of this situation and took steps to minimize claims occurrence. The search

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[124] "Maximum Loading--A Breakthrough in Attitude," The Rolling Reporter, June 1968, p. 2.

for accident prevention programs led to Mason Dixon's enrollment in the National Safety Council in 1936,[125] and W. D. McLain, General Claims Agent, was named to supervise a newly created Safety Department in 1937. A safety department was unusual at that time for a motor carrier. A 1937 article in Fleet Owner magazine featured Mason Dixon's Safety Department as well as the Gear Shifter's Club, a driver's organization sponsored by the Company for the purpose of promoting operations safety.[126]

To make a safety program work, it was necessary to provide a positive incentive for the operation personnel to take the proposition seriously; therefore, the company supplemented intangible rewards of personal pride and public recognition of safe driving records with tangible awards of uniform items, jewelry, household appliances, and cash. By 1940, Mason Dixon was paying the equivalent of $15,000 a year in safety awards.[127]

Mason Dixon continued to seek ways to promote safety. In 1947, they joined other members of the American Trucking Associations in organizing annual "Roadeos" in which truck drivers throughout the nation competed in areas of knowledge and operational skill. In

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[125] A Narrative History of The Mason and Dixon Lines, Incorporated, (Kingsport, Tennessee: Industrial Relations Division of The Mason and Dixon Lines, 1979), p. 7.

[126] Ford Supy, "The Mason & Dixon 'Gear-Shifters'," Fleet Owner, October 1937, pp. 30-32.

[127] "Mason Dixon Records Show 'Talking' Safety Slashes Accident Rate for Line," Kingsport, Tennessee, Times, March 3, 1940, p. 6.

these events drivers were given a written examination, testing their knowledge of safe driving rules, of the trucking industry, of first aid, of firefighting, and of Federal safety requirements.[128]

Overall, the safety program was a success. In a period from 1950 to 1961, Mason Dixon won twenty-two national safety awards,[129] and was judged by John V. Lawrence, Managing Director of the American Trucking Associations, to have "a highly effective safety program, one of the 10 best in the nation."[130]

In 1959, the company received the National Safety Council's top award for Commercial Vehicles: Common and Contract Carriers. It was significant that this was the fourth consecutive year they earned this honor.[131] The tank lines, meanwhile, won top honors from the National Safety Council in 1959 for tanker operations.[132]

Each year the ATA conducts a National Truck Safety Contest and awards the President's Trophy to the motor carrier firm "found to be outstanding through the promotion of safety within its operation

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[128] "Mason-Dixon Company Roadeo is Oldest, Largest," The B-line, February 1955, p. 4.

[129] Internal corporate memo to E. Ward King, undated, unsigned, but probably 1962.

[130] "Mason & Dixon Lines Receive Praise for 'Highly Effective Safety Program,'" Transport Topics, September 3, 1956, p. 4.

[131] "Double Pleasure," Transport Topics, March 30, 1959, p. 18.

[132] "Mason and Dixon Receives Top National Safety Council Awards," The Rolling Reporter, March 1960, p. 1.

and through its overall contribution to the cause of highway safety."[133] Mason Dixon received this coveted award in 1959, 1961, 1963, and 1965.[134]

Computer Applications Lead to MADIX

Effective cost control requires a managerial cost accounting system. An important part of such a system is the maintenance of accurate, complete, and timely information. Detailed recordskeeping, for a truck line, is difficult to accomplish due to the large number of transactions accomplished at numerous terminal locations which may be widely separated.

The advent and increased availability of automated data processing systems have provided the generally accepted answer to the problem for nearly all large carriers. The American Trucking Associations reported the results of a survey conducted in the late 1960s which indicated that about 150 of the large Class I motor carriers used advanced electronic data processing equipment.[135] Another author observed:

> For trucking, the computer's capability for remote input and readouts is particularly noteworthy. Dispatching and the mountains of paperwork--once the Achilles' heel of freight movements--can now be handled with incredible speed and accuracy.[136]

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[133]"Top Trucking Safety Award for 1961 Goes to Mason & Dixon; Navajo Also Cited," Traffic World, July 21, 1962, p. 43.

[134]"Mason-Dixon Wins Highest Safety Prize," Kingsport, Tennessee, Times, April 19, 1966, p. 9.

[135]"Data Processing in the Trucking Industry," (Washington, D.C.: The American Trucking Associations, Inc., undated), p. 4.

[136]Bart Rawson, "From the Turn of the Century," Distribution Worldwide, September 1967, p. 37.

Mason Dixon was among the first motor carriers in the nation to begin using automated data processing equipment when they installed an IBM punched card system in their accounting department in 1937. By the end of the 1940s, the state of the art systems still relied on punched cards for data storage and wired peg boards to store programmed processing routines. These systems could process about 150 cards per minute and were used by truck lines for general accounting, payroll, claims, equipment maintenance and depreciation, accounts payable and receivable, as well as the vital traffic functions; analysis of freight originated and terminated at each terminal, revenue, loaded and unloaded miles traveled, and equipment and terminal costs. James Box, Machine Department Supervisor for Hoover Motor Express, Nashville, Tennessee, stated in a 1950 interview that the system employed by Hoover, ". . . enables our accounting to stay within 48 hours behind operations whereas under the old manual method, the lag amounted to a matter of weeks."[137]

Mason Dixon retained the punched card system of data management throughout the 1950s. As the volume of business grew, however, this system proved inadequate. "When we acquired Silver Fleet in late 1960, it just put us above the capability of our existing record system," remembered Frank Brumit, corporate Director of Accounting at the time.[138] "We justified the computer cost savings over the old unit record system [punched cards]."

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[137]"High Speed Accounting Methods Keep Freight Facts Rolling," Nashville, Tennessee, Tennessean, November 12, 1950, p. 32-F.

[138]Frank E. Brumit in interview with the author, Kingsport, Tennessee, August 17, 1981.

Charles Hardesty was a member of the executive committee and participated in the decision to buy the corporation's first computer. He throught the computer system made Mason Dixon's marketing program more effective. In his experience, marketing of motor carrier services,

> is just like everything else, you just have to do a little better than the other guy. In service primarily with an intelligent pricing system to go with it. And by service, I mean total service, I don't mean just transit time. Here's where your marketing comes in. For instance, consider the big computer system we have here [at Kingsport]. It's one of the best telecommunications systems in the country.
>
> In the beginning we were in a pool, we realized that it was going to require a multi-million dollar commitment and we weren't sure that we could pull it off. There was no technology at the time, IBM didn't have a package that would work. They had one that they were trying to sell and were selling it. But, it wouldn't work, believe me. The technology wasn't there.
>
> We decided to do it ourselves.
>
> We [the executive committee] sat around that table upstairs a few years ago and blindly committed ourselves to about a five year project costing between five and seven million dollars on the strength of one idea alone, that we were in the service business and that our ability to serve is going to be the final thing. We better tend to that capability and do everything we can to upgrade it.
>
> We had some real soul searching sessions but we finally resolved our doubts and were ready to make the commitment. There were about six of us around the table. We held hands and said a prayer and said, "Let's go."[139]

One of the general problems in automation is the matching of hardward (the electronic machine), the softward (the machine's instructions), and the information requirements of the user. The

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[139]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

situation facing Mason Dixon after the decision to computerize had been made was that there were no suitable softward systems available. Each company selling machines had a program that was supposed to serve truck operators' needs, but these were judged to be inadequate. Recall Charles Hardesty's comment, "IBM didn't have a package that would work."[140] Consultants could be hired, but they would take time to learn the carrier's specific requirements. And, recall Ray Warren's observation, "We never had much luck with outside experts.[141] From the beginning, Mason Dixon's position was that it would be easier for an experienced company employee to obtain a working knowledge of computers than for a computer expert to learn all that was necessary to know about trucking in general and Mason Dixon in particular. They would develop the needed programming in-house.

Not all truck operators agreed with this position. Carolina Freight Carriers (CFC), Cherryville, North Carolina, a competitor, was also considering a computer system in the late 1960s. Their Corporate Treasurer at the time, Kenneth E. Mayhew, Jr., stated:

> Our basic problem was that we lacked information as to where we were making money and where we were losing money. Without good information, we were severely handicapped. Management decisions are only as good as the information

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[140] Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[141] Raymond L. Warren in interview with the author, Kingsport, Tennessee, October 23, 1980.

> on which they are based . . . we concluded that we should develop a computer-oriented shipment profitability system by which the profit or loss on each shipment is computed based on actual costs for the current month. We also decided that outside assistance in developing this system would be desirable.[142]

CFC retained Midwest Research Institute as a technical consultant to write the software package.

At Mason Dixon, an employee team of functional specialists was formed to survey the options available for computer conversion. Controller Donald K. Good led the team; their goal was to create a user-oriented system.

> We tried to get ours developed so that it would be for users instead of something that was just put in so the user had to . . . use what was there. We tried to look at it from his standpoint . . . . It was a system we designed ourselves. . . . [It was a success because] we didn't lose control, lots of times people lose control when they get into new things. It happens very easily.[143]

Frank Brumit continued:

> We had a man we sent to programmer school . . . so we developed this traffic lane analysis, that just opened the door for all those other applications. The computer became a tool for management as well as accounting . . . it was primarily developed in-house from what Traffic and Sales and some other people felt like they needed. We developed it. I guess we thought the first report we produced would be just right; right format, right information, and all. We sent it to Marketing, only at the time it was called Traffic or Sales. Darn it! It sat there for three, four, or five months and they didn't know what to do with it.

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[142]Kenneth E. Mayhew, Jr., "A Computerized Shipment Profitability System as a Management Tool," First Place article in 1971 contest sponsored by National Accounting and Finance Council of the American Trucking Associations, Inc.

[143]Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

> We finally had a meeting. I told them what information was on the report and how I thought they could put it to use and how it would help them out. Several of us discussed it for awhile and from then on we couldn't make new reports fast enough. It was primarily a matter of people getting together to determine what this system could do to fulfill a need.[144]

By having the provider of the data, the user of the information, and the specialist who transforms data into information, all on the same corporate team, Mason Dixon found it to be more satisfactory to produce softward in-house than to use outside vendors. In September 1962, the firm purchased an IBM Model 1401, their first electronic computer. This machine had the dual capability of accepting input from either cards or magnetic tape.[145] It also had a greatly increased computational capability and was much faster than the punched card equipment it replaced. E. William King noted at the time, "Finding a more efficient method of computing and producing the fleet revenue reports and payroll records required by management was the prime consideration in converting to electronic equipment.[146]

In 1962, the combined Mason Dixon and Silver Fleet systems handled 1,949,000 less-than-truckload shipments and 46,000 truckload moves through their network of thirty-seven terminals.[147] The new

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[144] Frank E. Brumit in interview with the author, Kingsport, Tennessee, August 17, 1981.

[145] "Our Company's History," The Rolling Reporter, December 1975, p. 4.

[146] "New Data Processing System Now Installed," The Rolling Reporter, November 1962, p. 3.

[147] TRINC Transportation Counsultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1963), pp. 31, 75.

IBM 1401 could process 160,000 freight waybills each twenty-eight day accounting period.[148] Shipment data was fed into the central computer from remote stations located in each freight terminal. A high speed printer with a 600 lines-per-minute capability was used to produce the shipping documents. Shipment data was stored on magnetic tape and used in generation of 275 management reports prepared at the end of each four-week period.[149]

The next computer generation, an IBM 360, was installed in 1967. This system doubled the computational capacity of the previous equipment.[150]

A capability to print freight waybills at destination terminals for incoming traffic was achieved as Phase I of the MADIX (Mason And Dixon Information eXchange) project. Initiated in 1969, this program involved placing thirty-five IBM Model 2740 sending/receiving devices in terminals and linking them to the IBM 360/40 main computer located in Kingsport.[151] This conversion reduced the administrative delay which previously existed when the freight was ready for dispatch but the paperwork was not yet completed. Now the paperwork could flow in an electronic channel rather than accompanying the freight.

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[148] "Mason & Dixon Installs New IBM System," Traffic World, November 17, 1962, p. 47.

[149] "New Data Processing System Now Installed," The Rolling Reporter, November 1962, p. 3.

[150] "Our Company's History," The Rolling Reporter, February 1976, p. 8.

[151] "New System Planned," The Rolling Reporter, August 1969, p. 1.

Under Phase I of the MADIX project, the computer was used for accounting, management report preparation, and communications throughout the system. Subsequent phases were planned to enhance shipment tracing, provide for centralized rating and billing, and to increase the system's contribution of information to management's decision making process. The basis for Mason Dixon's success in implementing these computer projects lies in 1) their decision to develop software in-house and 2) their implementation of this undertaking in a planned series of steps or phases.

6. SUMMARY: CONTROLLED GROWTH IS ACHIEVED

The decade of the 1960s was a period of general prosperity in the American economy. Federal deficit spending, the Great Society, the Viet Nam War, and expectations on the part of American producers and consumers made it a period of unprecedented growth. Mason Dixon benefitted from that prosperity. Their program of growth through acquisition of other truck lines was consistent with a general corporate policy of territorial expansion and increased market penetration. Operating revenue grew from $20,512,000 in 1959 to $55,588,000 in 1969.[152] Total miles of operating authority grew during this same period from the original 5,500 miles to over 18,000 miles.

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[152] TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1960 and 1970), pp. 28, 100.

Whether by good management or good fortune, the rate of expansion matched the company's ability to absorb and integrate new acquisitions into the established route structure and corporate organization. In an era when many motor carriers were rapidly adding major territorial blocks to their operation, the companies that took time to consolidate their positions prior to hurrying to the next purchase fared much better in the long run. Unlike Mason Dixon, many motor carriers have been unable to profitably integrate their acquisitions. For example, Associated Transport of New York started as a combination of seven small truck lines and eventually grew to be the largest motor carrier in the nation. In spite of its size, the company was plagued with poor managers. It was never profitable and eventually went bankrupt. Even a traditional industry leader like McLean experienced an increase in overall operating ratio immediately after their purchase of Navajo in 1980.[153]

This is not to suggest that all Mason Dixon's acquisitions were free of problems. Silver Fleet was a money-losing proposition when the Kings bought it. It took about eighteen months to get the personnel, equipment, and financial problems resolved.[154] However, the experience gained in the Silver Fleet acquisition provided valuable lessons for future efforts. The fact that the Silver Fleet

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[153] Annual Report, McLean Trucking Company, (Winston-Salem, North Carolina: McLean Trucking Company, 1981), p. 2.

[154] E. William King in interview with the author, Kingsport, Tennessee, August 11, 1980.

operation was made profitable and the larger system was then operated successfully testifies to the skills of Mason Dixon's executives and the vision of E. Ward King in recognizing a true opportunity.

The corporate goal of revenue growth, stated in 1959, was achieved. However, increased revenues produce increased profits only when expenses are controlled. Mason Dixon's profit performance was far less impressive than their revenue growth (Table 4.4, p. 172). In 1959 the company claimed a net profit of $890,000; in 1969 net profits were $583,000; about half the profit on more than twice as much business.[155] In trucking parlance, the objective is to "keep the operating ratio down."[156] This was not accomplished. In a ten year period the operating ratio rose from 93.08 to 97.03. Traffic generated by expansion efforts was costing more to serve than the original commodity flows.

Decreased profitability during this period was due to management's concentration on revenue growth rather than profitability. In the following decade there was a shift in emphasis to improve

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[155] TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1960 and 1970), pp. 28, 100.

[156] Operating ratio is the firm's operating costs divided by operating revenues. The result is multiplied by 100. For example, a firm with an operating ratio of 95 spends $95 to generate $100 in revenue. Checking a motor carrier's operating ratio is similar to the physician taking his patient's temperature; it lacks the sophistication of a complete physical exam but it is a quick and simple indication of the presence and degree of seriousness of possible problems.

management systems, a move designed to maintain revenue growth and simultaneously increase profitability.

CHAPTER V

GAINS ARE CONSOLIDATED THROUGH MANAGEMENT IMPROVEMENTS 1970--1982

1. INTRODUCTION

If the 1960s could be characterized as a period of economic prosperity, the 1970s must be viewed as a time of adversity. National economic recessions in 1970, 1975, and 1980 struck particularly hard at the motor carrier industry because, ". . . trucking, like transportation in general, tends to be on the leading edge of economic recessions . . . ."[1] Inflation, running in excess of 10 percent, caused interest rates to triple during the decade; debt financing was severely restricted.[2] Fuel shortages caused by the Organization of Petroleum Exporting Countries' (OPEC) oil embargo and subsequent rise in fuel prices created hardships for all motorists and particularly truck operators. A series of strikes by independent truck owner-operators, staged to protest the fuel crisis, disrupted virtually all motor transport operations in large sections of the nation. Finally, as the decade drew to a close, the prospect of significant economic deregulation swiftly proceeded from a proposal to reality.

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[1]"Where the Missing Truck Freight Is Going," Business Week, December 24, 1979, p. 44.

[2]Mason Dixon traditionally used debt as opposed to equity sale to raise capital.

The 1970s were both a period of management challenge and opportunity, although the same could be said for any period in motor transport history. Martin M. Long, who spent forty-three years in the industry, observed:

> it's been changing all the time. One day there's the kind of business a carrier could develop and make money and then tomorrow it is all changed and you have to go out and develop a new tack, several times over the years. . . . Those who are sharp enough to see it coming and do something about it are the ones that survived. The old rules were no good anymore. You just have to forget about them and that's hard to do for someone who has made a great success of a business because he followed one set of rules. Suddenly, they have to accept the fact that these rules are no longer any good; it's hard to do. Not everyone is able to do it.[3]

Mason Dixon entered the decade of the 1970s with a strong operational base. The Silver Fleet operation had been made profitable and was completely integrated into the Mason Dixon system. Markets obtained in the Yankee Lines purchase were rapidly following the same course. Through these two major acquisitions, the scale of operations had more than doubled during the 1960s.[4]

2. CORPORATE OBJECTIVES FOR THE 1970s

Corporate growth objectives for the 1970s were 1) to consolidate Mason Dixon's position in existing markets by expanding the

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[3]Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[4]Ton-Miles operated in 1960 were 359 million; in 1970, 804 million. Operating revenues grew from \$20.574 million to \$55.916 million over the same period. Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1961 and 1971).

regular route system to all-points authority; 2) to selectively acquire smaller regional carriers to expand both the area of service into attractive markets and to protect interline traffic; and 3) to increase both the volume and proportion of less-than-truckload (LTL) traffic.

The basis for a number of the irregular route applications was explained by Donald W. Penland, Vice President, Traffic:

> We are seeking all-points authority because industry is being forced to move out of town. A regular route carrier, restricted to a specific highway and just the commercial zone of the points served, is unable to reach a lot of firms that have moved out to the country or to industrial parks. Those parks simply weren't there in the 50s and 60s. They are often located outside the city's commercial zone or more than a mile from the principal so they fall beyond the scope of the original authority. This is true all over to some extent, but it's particularly noticeable in the South's industrial development.[5]

He continued:

> There were several PC&N [Public Convenience and Necessity] applications during the years 1971--1980 for authority to serve specific plant sites located just off our regular routes. None of these are individually noteworthy, but cumulatively they figure prominently in our decision to begin expanding authority to encompass all points in states in which we operate. As industry and business moved out of cities, we needed to be able to serve them without having to go through an operating rights application each time a move occurred.[6]
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> Sometimes we obtained these operating rights by application to the Commission [ICC]. Other times we could buy what we wanted from other carriers. One example in the

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[5]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[6]Letter from Donald W. Penland to the author, August 21, 1981.

> Chicago area, Econ, Inc., gave us a 50-mile radius of Chicago. A lot of the businesses were being forced to move out of the commercial zone of Chicago and new businesses were being established outside the commercial zone. We needed that expansion to be able to serve our customers who were moving out as well as new customers who were locating on the outskirts of greater Chicago.[7]

A second corporate objective, to extend the geographic area of service coverage into attractive markets, usually involved acquisition of operating rights from other carriers.

> The [first] objective is to fill in with all-points authority the area in which we had substantial operations. And, [second] extend the operation to all points in the adjoining states that adjoin our present authority, where we have substantial business with connecting carriers, joint line service. The reason being that the small carriers in today's climate are finding it very very difficult to stay in business. A lot of our connecting lines have sold out, dried up--which is just quit--or have gone bankrupt. With the result that our traffic potential is being restricted because of the extension of our competitors to offer single line service from two areas that we formerly served through connecting lines.
>
> And, of course, we are protecting our best interest in these cases because we are asking for, and have been granted, [in the late 1970s] authority to serve all-points in these states. This will allow us to serve business and industry people wherever they are located, not just on the principal highways.[8]

A third corporate objective was to maximize the profit obtained from operation of an extended route structure by concentrating on building up the less-than-truckload (LTL) traffic segment. George A. Maiden remembers that in the late 1960s, ". . . the computer analysis

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[7]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

[8]Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

showed that LTL was profitable; therefore, that's the direction our marketing program went."[9] A. B. Bell, Jr., a Regional Director in the late 1960s, remembered the sixties as the period when the company began a program to seek out LTL traffic seriously. This was a program which gained intensity as the 1970s progressed.[10]

Charles D. Hardesty saw things from a different perspective:

> There really hasn't been a change in philosophy or policy, only in the degree with which we tried to implement that philosophy. We stepped up our efforts when we realized that what we wanted wasn't happening. We weren't growing in LTL as fast as we needed to grow. So, at different times over the years we have campaigned. . . . We had different programs to build traffic, but I can't see any real change in philosophy.
>
> Consider this company. We have terminals everywhere possible. We have added terminals as we have expanded. That's only because of LTL traffic. They are dedicated to LTL traffic. Since the war [World War II] Mason Dixon has dedicated about 90 percent of its brain power, capital, and facilities to handling LTL traffic. Hell! We don't need all these people around here [in Kingsport] to handle truckload operations. We could get rid of this whole building and handle ten times the truckload business we have now. It's all LTL oriented and always has been.[11]

Whether the search for LTL expansion represented a change in management direction or was an intensification of existing programs, it is clear that reappraisal of the company's marketing effort was in order. During the 1970s, both the marketing organization and

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[9]George A. Maiden in interview with the author, Kingsport, Tennessee, August 10, 1981.

[10]A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

[11]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

marketing programs were modified extensively. Marketing organization will be examined in the next section; marketing programs will be covered following that.

3. ORGANIZATIONAL CHANGES: MARKETING AND OPERATIONS INTEGRATED

One of the organizational problems facing transportation companies is the conflict between operations and sales. The difficulty is caused by differing points of view regarding customer service. This is of particular concern to an LTL carrier, like Mason Dixon, because customer service is one of the strongest bases of the marketing appeal. Salesmen, particularly in a regulated, price-fixed industry such as common motor carriage, are convinced that high levels of customer service are essential to capture and retain sales accounts. Salesmen regularly assure accounts that their freight will be given priority service, then they expect Operations to live up to these assurances.

Operational managers are under constant pressure to provide high service levels to all customers while controlling costs. However, raising customer service standards results in increased operating costs. This conflict has been evident to some degree throughout the history of transportation. Bill Popejoy recalled Mason Dixon's experience during the early 1950s:

> there was always a lot of friction between terminal managers and sales, always a lot of friction. Sales said the terminal managers wouldn't cooperated with them in moving their freight and the terminal managers were saying Sales wouldn't cooperate

> with us at all. After Charlie Chrosniac left and went with Thurston [in 1964] Kingsport thought they would break that problem by going to the regional set-up that had both Sales and Operations reporting to the same regional manager.[12]

With responsibility for both functional areas vested in the Regional Manager, many of the conflicts were resolved. A. B. Bell was involved in making the new organization a management success. He recalled:

> When we consolidated Sales and Operations, well, it seemed to me that they got along better after that. Of course, I always thought that Sales should have been made a part of Operations and I guess Sales people thought it should have been the other way around. But, after the consolidation, some salesmen became managers and some managers became local salesmen. It worked out.[13]

The next logical step was to integrate these two vital functions at the local level. One of the corporate executives instrumental in the successful implementation of this management innovation, Charles D. Hardesty, summed up the carrier's experience:

> For quite a while we were like other carriers. Most all carriers ran their Sales department completely separate from their Operating department, even out in the field.
>
> Then we pulled a switch--we made the Terminal Manager responsible for everything in that terminal. Everyone reported to him. That was a big step in the right direction and most of the other carriers are now doing the same thing. We were one of the early ones to take this step.
>
> . . . .
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> About the first thing we had to face here at Kingsport was that it was going to be a whole new ballgame as far as Terminal Managers were concerned. All trucking companies make it or break it at the terminal level. That's where

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[12]William Popejoy in interview with the author, Knoxville, Tennessee, November 11, 1980.

[13]A. B. Bell, Jr., in interview with the author, Powell, Tennessee, April 9, 1981.

we form our customers. If our local representatives, the Terminal Managers, aren't sales-oriented or customer-oriented, they don't need to be out there. In too many cases we had operating people running the terminals, people who were more concerned about their own bailiwick than with customers. Not all of them, of course; some of them worked out beautifully.

. . . .

Anyway, George Maiden [Vice President-Terminal Operations] and I got together and decided what kind of guy it would take to make these new terminal responsibilities work. We redescribed the qualifications of a Mason Dixon Terminal Manager. And they were entirely different from what they had been. That's where we deliberately started a new plan of the terminal management development. We had to re-examine the whole management thing; hiring, training, motivating, evaluation. I think we did it with some success. We now have some really find guys that can do the total management job. To me that was a momentous time in the evolution of our company . . . when we threw the switch and then re-thought how to develop our managers in the field.[14]

The final step in the total integration of these two areas of motor carrier management was a merging of responsibility at corporate level. This occurred in March 1970, when Charles D. Hardesty was appointed Vice President--Operations and Sales, a newly created corporate position with full responsibility for sales, traffic, terminal operations and transportation. In making the announcement of the change, John R. King, Executive Vice President and General Manager, said:

As far as we know, no motor carrier has ever consolidated responsibility for sales, traffic, and operations under one head. This seems to us the logical way to go in placing responsibility for all functions directly related to customer service and satisfaction under a single head. It's no

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[14]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, April 13, 1981.

> coincidence that under separate heads, interaction--or lack of it--among those functions gives rise to most of the complaints shippers level against the motor carrier industry. Our new organization proposes to change all that.[15]

The new organizational structure did away with the existing regional areas of responsibility. Regional Managers were redesignated Field Operations Directors and were assigned to specialized functional areas on a system-wide basis. This particular element of the reorganization proved to be imperfect. A year later Regional Manager positions were re-established for the three main geographical areas of the system: Eastern, Western, and Central. In 1973, addition of the New England operating authority brought about still another regional re-alignment; creation of the New England Division.[16] The four-regional organizational framework was retained throughout the remainder of the decade.

Market Area Expanded by Acquisitions

The emphasis on revenue growth continued. As in the past, the company remained alert to potential acquisitions which would compliment the existing route structure. A significant increase in the territorial scope of Mason Dixon's operation occurred in 1971 when its operating authority was extended south from Birmingham, Alabama, through Montgomery to Mobile. This extension was accomplished

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[15] "Major Changes Told," The Rolling Reporter, May 1970, p. 1.

[16] "Structure, Staff Changes for Three," The Rolling Reporter, February 1973, p. 4.

through purchase of part of the operating rights of the bankrupt A-OK Truck Lines of Opp, Alabama. As in the case of previous purchases, the company's primary interest was in obtaining operating authority; no tangible assets were obtained in the A-OK transaction.

Extension of service to the Gulf Coast and the Port of Mobile allowed the company to begin to offer a domestic trucking service for import-export traffic. But more important, it eliminated the need to interline traffic moving between Mobile and major cities in the eastern half of America.

In late 1972, negotiations were initiated with E. J. Scannell, Inc., a Sommerville, Maine, truck operator, to purchase authority which would extend the system north from New York City to Bridgeport, Hartford, and New Haven, Connecticut, and Springfield, Worchester, and Boston, Massachusetts.[17] The necessity of this purchase was explained by Donald W. Penland:

> Mason Dixon has always gone as far north as New York City. At that time [1972] we were handling a great deal of traffic between the South and New England which was interchanged with other carriers beyond New York. But a lot of these short-line carriers between New York and Boston and other New England points were beginning to sell out to long haul carriers. Our share of that business was dwindling because our competition was going in and offering single line service as opposed to our joint line service. Then, too, our connecting carriers were selling out to our competition and cutting off our traffic. So, we felt that we were required to get that authority to retain business that we had handled for years and years: to and from New England.[18]

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[17] "New England Authority Given OK," The Rolling Reporter, February 1973, p. 4.

[18] Donald W. Penland in interview with the author, Kingsport, Tennessee, August 20, 1981.

A similar expansion to the west involved purchase of authority from Nestor Brothers to serve Binghamton, Syracuse, Rochester, Buffalo, and Niagara Falls, New York.[19]

A further move was made in 1976 to strengthen Mason Dixon's competitive position in the Eastern market. The company applied to purchase General Motor Lines, Charlotte, North Carolina in order to obtain all-points authority in that state.[20] Market coverage was also an incentive for purchase of City Transfer and Storage of Rock Hill, South Carolina, an irregular route carrier.[21] These purchases were the first in a series of moves designed to ultimately convert all Mason Dixon authority from regular to irregular routes and, thereby, open up new markets. These two purchases were approved by the ICC in 1977.

Additional actions were taken in 1977 to expand the Northeast authority. In one, a route from Erie, Pennsylvania, to Buffalo, New York, was purchased from Roadway Express. The effect was to provide an economical access to Buffalo from the Central States; previously held authority was circuitous and not competitive. In another 1977 purchase, regular routes in Connecticut and Massachusetts were purchased from M & M Transportation Co.[22] The 1978 purchase of

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[19]"To the Future," The Rolling Reporter, November 1972, p. 3.

[20]"Mason Dixon to Purchase Line of Trucks in North Carolina," Kingsport, Tennessee, Times, June 19, 1977, p. M-58

[21]"Mason Dixon Gets Authority to Serve South Carolina Points," Kingsport, Tennessee, Times, July 8, 1977, p. M-58.

[22]Letter from Donald W. Penland to the author, August 21, 1981.

Moan Bros. provided regular route authority between Boston and Providence, Rhode Island, plus irregular route rights to all points in Rhode Island.[23] The last two acquisitions were made to protect interline traffic.

The Moan authority was the last expansion accomplished by purchase of operating rights. With the changing National Transportation Policy and subsequent legislative action, it was no longer necessary to grow through acquisition. In the future, expansion was to be accomplished by applying directly to the Commission for additional authority.

Marketing Programs Adjust to Changing Needs

The 1973 embargo on oil exports by the OPEC nations had both immediate and long term effects upon the American economy, and on the motor carrier industry in particular. The embargo brought about fuel shortages and a dramatic increase in the cost of fuel. This, in turn, caused discontent among truck owner-operators and led directly to their attempt to shut down the nation's motor transportation system. In the long view, the OPEC embargo and subsequent petroleum price increase contributed to a worldwide recession which had adverse effects on all producers and consumers.

The American Trucking Associations reported:

> The trucking industry in 1975 was affected, like most industries, by the worst economic recession since the 1930's.

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[23] Letter from Donald W. Penland to the author, August 21, 1981.

> Except for a few types of specialized carriers, all segments of the industry suffered due to the recession and the large liquidation of inventory accumulations.[24]

An indication of the degree of decline is revealed by an ATA survey of thirty-five metropolitan areas which showed that, "for the week ending Feb. 15, [1975] inter-city [common carrier] freight was down 26% by weight compared with the same week in 1974."[25] Mason Dixon's operating revenues for 1975 were down 15 percent from the previous year.[26] Profits, however, plunged from $1.328 million in 1974 to a mere $27,000 in 1975.[27]

Part of the motor carrier industry's problems may have been its own fault. Truck lines of all sizes have traditionally been operations oriented. The reason for this condition is due to the background of the majority of the first generation motor carrier owner-managers; they started in the business as truck drivers. In their struggle to survive the 1930s and 1940s, they dealt primarily with operational problems. The experience strongly influenced motor

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[24] William A. Bresnehan, "Forward" to American Trucking Trends, 1975, (Washington, D.C.: American Trucking Associations, Inc., 1976), p. i.

[25] "Layoffs: Recession Hits the Trucking Industry," Fleet Owner, April 1975, p. 7.

[26] TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., 1975 and 1976).

[27] This appears to provide some emperical support for the proposition that LTL-based motor carriers can experience some economics of scale. In this case, output fell from 1.134 million ton-miles in 1974 to .88 million ton-miles in 1975, a 29 percent change. Profits fell 98 percent. This highly levered position is almost certainly due to the fixed costs associated with an extensive terminal system, an LTL-oriented characteristic.

carrier management attitudes through the 1960s. Hugh Norton, an industry observer, noted in 1971:

> For some reason, carriers seem to fall into the serious error of stressing operating convenience at the expense of customer convenience. Perhaps because the operating departments are as a matter of necessity given ultimate authority in many matters, they often seem to dominate the entire organization.[28]

The recession of the 1970s forced motor carrier managers to adjust their organizational structures and priorities. They began to place more emphasis on marketing or at least on sales. One firm

> faced with falling traffic tonnage and revenues, cut personnel costs by 25 percent. Reductions in force have been virtually across the board except for salesmen who are more important than ever before. . . . "Let's say we've got some awful pressure on these salesmen," said the truck line's president.[29]

These two comments represent a growing awareness that operational efficiencies alone were not the single solution to the problems of the recession. In an article written ten years before the recession, Everett Martin advised:

> Cost squeezing can go just so far without impairment to service, hence risking customer irritation leading to possible customer loss. Efficient methods and equipment are reaching a plateau of development. . . . If, however, operations and sales were to team up, a high profit job could be done.[30]

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[28] Hugh S. Norton, Modern Transportation Economics, 2nd Edition, (Columbus, Ohio: Charles E. Merrill Publishing Company, 1971), p. 195.

[29] "Layoffs: Recession Hits the Trucking Industry," Fleet Owner, April 1975, p. 33.

[30] Everett F. Martin, "Trucking's Final Profit Barrier," Trucking Business, March 1965, p. 15.

The essence of Martin's idea was to concentrate on achieving balanced traffic patterns.[31] With a balanced operation, sufficient freight is available to fill each vehicle that is dispatched, the vehicles are used to the limit of their capacity, and no resources are wasted on non-productive, empty backhauls.

One of the primary objectives of the motor carrier's marketing program, as Martin saw it, was to build up the light side of an unbalanced traffic pattern. There is more profit potential in this than in sales on the heavy side since the freight that utilized backhaul capacity is moved at a low marginal cost of service. Another of Martin's suggestions was to solicit the higher rated commodity flows, specifically LTL traffic.[32]

Mason Dixon's marketing programs have always been one of the company's management strengths and show evidence of employing most of Martin's ideas long before they were published. During the early years there were many operational problems to resolve, but E. Ward King recognized that sales was the critical function. This marketing management perspective may be explained by the fact that King was essentially a businessman, not a truck driver. His previous business experience had been in vehicle sales. He saw from the beginning that the key to survival lay in generation of sufficient traffic volumes

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[31] Balance refers to the condition where traffic in one direction is equal to the traffic in the opposite direction.

[32] Everett F. Martin, "Trucking's Final Profit Barrier," Trucking Business, March 1965, p. 16.

to allow efficient utilization of the vehicle fleet. He also understood that volume was not enough; it was essential that north-bound and south-bound traffic be balanced. King's earliest contributions to the initial survival and ultimate success of The Mason and Dixon Lines were his sales efforts in New York City generating backhaul loads.

During the late 1930s, when King shifted his management efforts to corporate administration, he ensured that the sales function would continue to receive strong guidance and support. Jack Dempsey, in addition to his expertise in regulatory matters, was also a highly successful salesman. Dempsey spent much of his time developing and maintaining customer relationships with major shippers in New York and Atlanta.[33]

The post-war decision to modernize the vehicle fleet and expand the terminal system was based upon an expectation that the Sales Department would generate sufficient traffic to utilize the system's capacity. The new terminals were specifically designed to process small shipments so the freight salesmen were instructed to seek LTL traffic. This was not a new requirement. As Charles Hardesty observed, "Mason Dixon has always been an LTL carrier."[34]

It is generally agreed among students of Business Logistics that American businesses began to recognize the importance of Physical

[33]In performing this activity he was a forerunner of today's national account salesman.

[34]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

Distribution Management in the late 1950s.[35] As professors and practitioners refined the management of this function, greater demands were placed upon the transportation industry. The more perceptive carrier managers were quick to note the change. E. William King wrote in 1967:

> There is a quiet revolution underway in the approach to the transportation function in our economy. Industry is beginning to look at transportation in terms of the broader perspective of the total distribution function. Not only is this changing the perspective of the buyers of transportation; it is also changing the marketing objectives and techniques of the carriers. We are trying to reorient our own people to a genuine commitment to customer transportation problem-solving, at the same time taking steps to develop their capabilities to back up such a commitment. In short, there is developing a much more sophisticated and realistic approach to transportation by both the buyers and the sellers which is changing the product itself [transportation] and the qualification requirements of those dealing with it.[36]

Through the mid-1960s, Mason Dixon maintained national account sales offices in New York City and Cleveland, Ohio. The traditional sales approach was employed for firms that had extensive operations and routinely routed large, regular volumes of freight via Mason Dixon. About the time of Bill King's letter, it was decided to shift to a stronger marketing approach and centralize the national account sales effort in Kingsport. The major competitive objectives of this

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[35]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[36]Letter from E. William King to Dr. James W. Bennett, Jr., March 1, 1967. At that time, Dr. Bennett was Professor of Transportation at The University of Tennessee, Knoxville, Tennessee.

new approach were to recapture traffic from railroad piggyback service, to seek better traffic balance, and to develop more profitable traffic even though the balance was upset. Regarding the last objective, the company's marketing executives felt that the benefit of increased revenues was greater than the cost of operational imbalance.[37]

In 1968, Mason Dixon created the new position of Marketing Coordinator in an effort to overcome

> the most frequent criticism of carrier marketing operations, that salesmen lack in-depth knowledge of highly specialized industry requirements. . . . [These] sales-service specialists are able to offer shippers in-depth assistance in transportation and distribution. Each Marketing Coordinator will be assigned to a particular industry and be trained in that industry's transportation and economic requirements.[38]

It is significant to note in this announcement the reference to "carrier marketing." It was during this time period that Mason Dixon's executives began to expand their traditional view of the sales function into a broader marketing perspective. Two executives responsible for this change were E. William King and Charles D. Hardesty. The organizational change which placed Hardesty in charge of both Operations and Sales created the opportunity for development of an integrated marketing program. George A. Maiden observed that Hardesty brought a new degree of professionalism to the company's marketing effort.[39] Part of this trend toward professionalism was

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[37]Luther G. McLain in interview with the author, Kingsport, Tennessee, August 19, 1981.

[38]"Mason & Dixon Appoints Marketing Coordinator," Transport Topics, April 22, 1968, p. 46.

[39]George A. Maiden in interview with the author, Kingsport, Tennessee, August 10, 1981.

the implementation of the marketing concept for motor freight services.

The American Trucking Associations, Inc., recently has begun to issue a series of publications designed to educate the motor carrier management in the application of the marketing concept to its business. One of these publications defines the marketing concept and notes the penalties for failure to apply it:

> A production oriented firm is internally oriented. It decides what it wants to produce and sell to the buyer. A marketing oriented firm is externally oriented. It determines the consumer's needs, wants and aspirations, and designs both its products and its entire marketing program around them. Since World War II, many production oriented firms have lost huge segments of their markets to those who were marketing oriented. For example: retail management failed to determine consumer wants, and discount houses arose; auto producers stalled, and small car importers created a new market; railroaders slept at the switch and lost much of their market to truckers; distribution in general failed, providing many firms additional reasons to integrate vertically.
>
> Management of the motor carrier industry is in distinguished company! It, too, is production oriented. It, too, has failed to determine user needs and wants. Instead, it has a narrower view and tries to fit user needs to what the carrier produces. As a result, it has lost a substantial portion of its market to private carriage, shipper's associations, and piggyback. Almost certainly, these traffic losses will continue to mount unless motor carrier managements develop a different marketing posture; unless they adopt the marketing concept; and above all, unless they determine accurately what business they are really in.[40]

The essence of the marketing concept applied to a motor carrier operation is to: 1) identify the needs of the customer; 2) generate a market mix (service, price, promotion) that will meet the customer's

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[40] James A. Constantin, Jack A. Kasulis, Robert F. Lusch, and Paul H. Zinszer, "A Marketing Framework for a Motor Carrier of General Commodities," in James M. Faily, editor, <u>Marketing Motor Transportation Concepts and Applications</u>, (Washington, D.C.: American Trucking Associations, Inc., 1981), pp. 15-16.

needs; and 3) meet the profit objectives of the carrier. When properly applied, the objectives of both carrier and customer are adequately fulfilled.[41]

As Mason Dixon moved into the 1970s, emphasis was placed upon the application of the marketing concept. One of the problems which needed resolution was how to sell the marketing concept to the firm's own middle management. Luther McLain, currently Vice President--Marketing, recalled one of his experiences as a local freight salesman during the early 1970s:

> We [at Mason Dixon] are not perceived as marketing-oriented, even by some of the people within the company. I think the reason for this is because publicity isn't part of our marketing program. But we are very much so, and any other trucking company that's growing and doing anything is and has been marketing oriented--even Roadway Express, which everybody says is strictly an operational company.
>
> This perception can be a problem; I was given a new territory, virgin territory, in New York as part of my territory when I was a local salesman. After having gone up there two or three times, I got with our Research Department about the potential for a new terminal facility in that area. The City Sales Manager overheard me and called me into his office and made it clear that I was there to put revenue on the books for the York terminal and not to mess with things as a marketing expert. So, I went out and acted like a salesman. But, I built up that area to where a year and a half later we did open a new terminal up there.
>
> My experience in marketing helped me tremendously as a local salesman because I recognized the profitability of freight . . . therefore, I was able to spend my time very profitably; the freight I got was very profitable

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[41] John F. Throckmorton and Paul M. Mueller, Motor Carrier Marketing Management, (Washington, D.C.: Sales and Marketing Council, American Trucking Associations, Inc., 1980), pp. 2-3.

and the terminal [York, Pennsylvania] did exceptionally well.[42]

A lack of marketing awareness, such as McLain had encountered, was being addressed by the corporate staff at Kingsport. At the beginning of 1976, Mason Dixon executives announced a new corporate philosophy, a rededication to achieving customer satisfaction, at the Annual Meeting held at Sea Island, Georgia. The objective of this new philosophy was to reverse the poor financial performance experienced in 1975 and to "provide quality customer service within a realistic operating ratio."[43]

Probably the best example of a successful application of this new approach to marketing was the development and implementation of the MADCON (Mason Dixon CONsolidation) service. Again Luther McLain reports:

> A few years ago [mid 1970s] Montgomery Wards approached us to establish an assembly rate for all points in Tennessee to Nashville. Many small shipments would be consolidated at our Nashville terminal and dispatched as truckloads. They proposed that we perform this service and charge them a consolidation fee. They would move the consolidated shipments from Nashville to Chicago by the cheapest means available, whether that was Mason Dixon, their own trucks, piggyback, or whatever.
>
> That didn't fit our overall marketing strategy. We found that there wasn't any money in it for us to handle the short haul traffic. They tried to sell us on the idea because they wanted to deal with a major carrier. But, we couldn't get interested.
>
> We proposed to them that we simply move their LTL traffic along with our other flows and consolidate them

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[42] Luther G. McLain in interview with the author, Kingsport, Tennessee, August 19, 1981.

[43] "Development of 'Customer Satisfaction,'" The Rolling Reporter, February 1976, p. 3.

> in the Chicago terminal, then deliver them to Wards' warehouse as a truckload. We would put in a Commodity LTL scale of rates from various points in Tennessee to Chicago and then charge them, say, $30 to deliver the load from our terminal to their warehouse. They weren't interested in that deal because they figured their plan would save them 17 to 21 percent while ours would produce only a 6 to 7 percent savings.
>
> We didn't get together. Wards found a couple of short line carriers that would publish the consolidation and assembly rates. So, we lost some business, both LTL and, possibly, some TL on traffic that moved from Tennessee to Chicago.
>
> About a year later Wards opened a catalog house in Sharonville, Ohio, near Cincinnati. They realized that the economics of an assembly program weren't as good because it wasn't nearly as far from Nashville to Cincinnati as from Nashville to Chicago. Another difference was that interest rates were high, the prime went up to 11 or 12 percent, that was very high then. Their need to reduce inventory carrying cost and their need to improve service due to changing styles and fashions led them to conclude that reduced transit time was of a higher priority than cost. Their transit times had been running twelve to seventeen days from the vendor's dock to their store; this could be cut to about seven to ten days by us consolidating it at the delivery end. Another big advantage of this plan in Chicago was that it cut down the number of trucks making deliveries at Wards' warehouse. They had to line up trucks on public streets which led to congestion and delay.
>
> We eventually offered the same consolidation-at-destination plan that had been rejected a year earlier. At the same time we developed a similar plan for Cotter and Company [True Value Hardware Stores]. When they accepted and we put in the rates we called it MADCON.[44]

Through incorporation of the marketing concept into their marketing strategy, Mason Dixon was able to create a new class of service that specifically met the needs of a particular customer. They swiftly discovered that many others could profitably use

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[44] Luther G. McLain in interview with the author, Kingsport, Tennessee, August 19, 1981.

MADCON service. Soon, various consolidation and distribution plans were offered throughout the system.

4. OPERATIONAL MANAGEMENT IMPROVEMENTS

Territorial growth, market penetration, and creation of new services were used to generate additional revenue. Effective cost control practices were necessary, however, to produce profits from operating revenues. Throughout the post-war period Mason Dixon sought to minimize operating expenses by employment of modern terminal facilities and reliable equipment fleets. They also followed conventional management practices used elsewhere in the trucking industry.

Falling traffic revenues in the 1970s brought about by a declining national economy, and increasing costs, caused by inflation and the fuel shortage, demanded extraordinary cost control measures. The company's fuel conservation program illustrates the manner of savings possible under conditions of necessity.

Fuel Shortages Lead to Strikes and Conservation Program

OPEC was formed to control the price and quantity of oil on the world market. In late 1973, it declared a total halt to crude oil production and export. This move was motivated by political and economic considerations and was calculated to demonstrate the power and solidarity of Middle-Eastern oil producers. The results were undoubtedly more severe and far-reaching than anyone originally predicted.

The OPEC oil embargo may not have been the sole cause of the worldwide wave of inflation which, in turn, led to the current recession, but it certainly was a contributing factor. The supply disruption of 280,000 barrels a day lasted from October 1973, to March 1974, and not only produced widespread fuel shortages but caused fuel prices to increase over 50 percent at the same time.[45] The abrupt fuel price increases and waiting lines at truck stop fuel pumps were precipitating factors in the independent truck owner-operator strikes of 1973--74.[46]

The strikers sought to disrupt all forms of motor transport. Their objective was to force Congressional action to remedy the fuel shortages and price increases. To achieve these objectives they blocked fuel pumps at truck stops, blocked exits from truck parks, and even blocked some roads. Later, they employed violence and threats of violence.

The strikes did cause some isolated shortages of motor transported goods but were of no lasting effect. Public reaction was

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[45] Gasoline prices went from 32 cents a gallon in October 1973, to 50 cents a gallon in April 1974. Source: "Fuel, Has the Petroleum Era Ended?" <u>Fleet Owner Anniversary Issue 1928--1978</u>, 1978, p. 109.

[46] Owner-operators were particularly hard-hit by increased fuel costs. For an explanation of this industry segment see D. D. Wyckoff and D. H. Maister, <u>The Owner-Operator: Independent Trucker</u>, (Lexington, Massachusetts: Heath and Company, 1975). A trade magazine indicated that the problem has endured. "This year [1978], it is expected that nearly 25% of the nation's owner-operators will go out of business, primarily because of rising fuel costs." Source: "Fuel, Has the Petroleum Era Ended?" <u>Fleet Owner Anniversary Issue 1928--1978</u>, 1978, p. 110.

almost entirely negative. Faced with a lack of public support, the strikers abandoned their efforts by the summer of 1974.

Owner-operators may have felt that they were the primary victims of fuel shortages and price increases, but the adverse effects of these conditions were felt throughout the trucking industry. The approach to the problem used by the owner-operators was to complain, threaten, and disrupt. The approach of the well-managed truck operating companies was to seek out solutions.

In December 1973, fuel allocations were set by the Department of Energy at 73 percent of the 1972 usage level. During the same time period, December 1972 to December 1973, Mason Dixon's traffic increased 15 percent. Founder E. Ward King observed, "The reduction of our allocation leaves us woefully short of our needs."[47] The solution was conservation. Joseph E. Harvey, Vice President--Fleet Maintenance, explained that since 1974, the company

> belonged to the Volunteer Fuel Economy Program [sponsored by the ATA] in Washington. We get all the reports of every truck line that's involved in fuel economy tests. The trucking industry saved more fuel in the last three years than anybody. They are always complaining about us burning up fuel, but we have done more as far as fuel conservation than any other operation that I know about.
>
> We carried that fuel saving program around the whole system and discussed it with all our people, about savings and what it meant to this company: $2 million. We made more money in fuel economy than we could have hauling freight. So, it went over . . . .
>
> Our success was due to a combination of equipment modification and operating rules. . . . About two years

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[47]"Fuel Cutback Threatens Mason Dixon Operation," Kingsport, Tennessee, Times-News, December 1, 1973, p. 1.

> ago we started a program designed to increase our efficiency a mile a gallon. When we started we reset all our pumps, lowered the RPM and changed the [torque] curve. We were looking for a mile a gallon and I know we hit it. We went from about four and a half to five and a half, right now I think it's about five and five-eighths. We have been working on this since 1974 or 1975.
>
> It was driver's training, getting them to accept the philosophy that you don't have to run 65 mph to make your runs and cutting the RPM down. This saves fuel and gets better engine life too.
>
> . . . .
>
> [Our success was largely due to] the old drivers, the ones that made this company. You couldn't find more conscientious people to try to save the company money.[48]

In addition to motivating drivers to operate the equipment in the most economical manner, the company saved fuel by employment of mechanical devices such as temperature-controlled fan clutches, radial tires, wind deflectors, and smooth-sided trailers. Company President, John R. King, also maintained that adherence to the 55 mph speed limit was a major fuel-saving tactic. In 1978, the company reported a fuel savings of $443,000.[49] Even after adequate fuel supplies returned to the market, the conservation program continued as a cost reduction effort. In 1981 the company reported an efficiency gain of just over .2 miles per gallon compared with 1980 performance. This yielded a savings of $308,802.[50] Due to their successful fuel conservation measures, Mason Dixon was only

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[48] Joseph E. Harvey in interview with the author, Kingsport, Tennessee, August 14, 1981.

[49] "Mason-Dixon Reports Savings Through Energy Conservation," Kingsport, Tennessee, <u>Times-News</u>, May 21, 1978, page number unknown.

[50] <u>Operation TurnAround Update</u>, September 4, 1981, p. 1.

slightly affected by the oil embargo. The rapid fuel price increases of the mid-1970s were no more detrimental to the carrier than to the rest of the motor carrier industry. The early owner-operator strikes may have caused minor delays of traffic, but such disruptions were temporary. The most significant and enduring effect of the OPEC action was a persistent recession in the American economy. This recession was one of the causes for Mason Dixon's sluggish profit performance.[51]

MADIX and Other Computer Applications

Fuel cost savings were achieved through application of technology. Operating cost savings were possible through technological advances in other areas. Improved management information systems provided executives with the capability to quickly analyze the effectiveness of specific management actions. The utility of such a capability was, however, not universally recognized. Kenneth Troup, a rail-oriented transport analyst, observed,

> there is less potential in trucking for automatic control, especially the kind of process control involved in line-haul railroad train movement. . . . This simplifies the information requirements of the trucking industry.[52]

Mason Dixon's managers would not agree that trucking's information requirements are simple. In 1970, the combined system transported

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[51] See Appendix.

[52] Kenneth F. Troup, III, "The Application of Management Information and Process Control Systems to Intercity Freight Transportation," <u>Freight Transportation Digest</u>, October 1976, p. 100.

1,321,000 LTL shipments among 42 terminals spanning the eastern half of the nation.[53] The information required to monitor and control this traffic flow was far from simple. Development of the computer based MADIX (Mason And Dixon Information eXchange) was the company's answer to the challenge.

Phase I of the MADIX system had been installed in 1969--1970. It consisted of an IBM command and control system with remote units located at the thirty-five most active terminals. The original system's functions were to transmit freight bill information, to trace freight, and to assist in vehicle dispatch and control.[54]

Phase II of the MADIX system was installed in 1973. The original IBM 360/40 equipment was replaced with a greater capacity IBM Model 370/145. By the end of the year, there were seventy remote terminals in the system and an on-line, real-time capability was added. Rating and classification of shipments was still done at the terminals, but all shipments were billed through the central computer at Kingsport. All tracing inquires were also communicated directly to Kingsport. The new system was intended to provide faster, more accurate, and improved operational information.[55]

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[53] TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, 1971), p. 102.

[54] "Our Company's History," The Rolling Reporter, February 1976, p. 8.

[55] "MADIX Expansion Announced, 1973 Changes," The Rolling Reporter, February 1973, p. 3.

MADIX Phase III was completed in 1974 with the stated major objectives, "To provide customers with current information concerning shipments and to provide management with facilities needed to monitor services given to customers."[56] This objective was made possible through use of the on-line capability of the IBM equipment. Phase III provided for 1) preparation, transmission, and storage of information on all freight bills, 2) centralized rating capability, and 3) retrieval of current information concerning trailer or specific shipments from on-line data files.[57]

In accomplishing the paperwork reduction specified by the first goal,

> The customer bill of lading is turned over to a clerk at the truck terminal by the pickup driver. The information is keyed into a remote computer terminal by the clerk. No paper documents again come into play until the shipment arrives at the final terminal. At this time, another remote terminal prints out the completed freight bill for the consignee. All the information needed to move the shipment from origin to destination is held in the MADIX computer and can be accessed at any time by any terminal.[58]

The centralized rating capability was intended to add speed and accuracy as well as reduce costs.

> No freight bills are rated at the individual terminals. A specialized crew of rate clerks at the headquarters in Kingsport access the basic freight bill information on

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[56]"Phase III of MADIX," The Rolling Reporter, May 1976, p. 1.

[57]"Our Company's History," The Rolling Reporter, May 1976, p. 7.

[58]"On-Line, Over the Road," Distribution Worldwide, September 1978, p. 28.

> CRTs and add the proper rates. According to Mason Dixon, this system has cut the cost of rating in half and has reduced errors by at least 10%.[59]

A centralized rating system was implemented in 1975.

Not only did Phase III allow better rating, but it speeded the flow of information and allowed terminal managers to use arrival information for workload planning. In addition, employment of the centralized rating system allowed better supervision of the rate clerks, a perennial problem when they were located in the terminals.[60] It also allowed the clerks some degree of specialization which resulted in faster, more accurate rating.

The third goal of Phase III, a rapid tracing capability, was the feature which became best known to Mason Dixon's customers. Charles Hardesty, observed:

> Having an on-line system means we know what is happening to the freight right at the moment. If problems occur, we can do something about it immediately. Without this on-line, real-time capability, we could only document foul-ups after they happen, and that wouldn't help us or the shipper.[61]

By 1978, the MADIX system was being used by most departments to better manage their areas of responsibility. With managers by then completely familiar with the system's capabilities, it was

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[59] "On-Line, Over the Road," Distribution Worldwide, September 1978, p. 28.

[60] Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

[61] "On-Line, Over the Road," Distribution Worldwide, September 1978, p. 28.

possible to get management information on an almost instantaneous basis. This rapid reporting became part of the company's control function. Often problems were identified and solutions implemented before the situation reached a critical stage. Fleet managers were able to achieve better equipment utilization when the computer control system located needed units closer to the point of use. Claims for shortages were reduced when MADIX was often able to immediately locate corresponding long counts. A. Lowery Doggett, Director of Information Services, observed, "With this information available so fast, we often can have shorts [parts of shipments that become separated or mis-directed] headed back in the right direction before the rest of the shipment is delivered."[62]

From their earliest experience with advanced information processing systems, Mason Dixon had purchased the machines from International Business Machines but had developed the operating systems using company resources. In answer to the question, "Where did MADIX come from?" retired corporate controller Donald K. Good responded:

> Our own people designed it. We sent a bunch of men to visit a number of carriers and we found out what they were doing and how they were approaching certain things. They went out to Consolidated [Freightways] and others that we felt were pretty far advanced. . . . I think that one field trip paid off an awful lot to us.[63]

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[62] "On-Line, Over the Road," Distribution Worldwide, September 1978, p. 30.

[63] Donald K. Good in interview with the author, Kingsport, Tennessee, February 10, 1981.

In addition to the MADIX system, computers found application in other areas of the company. As the numbers and geographic dispersion of the company's employees increased, it became necessary to develop a more complete personnel management system. In 1971, an automated Personnel Activity Reporting System (PARS) was installed. An IBM 370/135 was purchased in 1973 to handle the batch processing requirements of PARS, Accounting, Maintenance Control, and the other time-phased activities. Mason Dixon's successful application of computer technology led to formation of a subsidiary, Crown Data Center. This company sells computer consulting service which is based upon successful problem-solving approaches developed at the parent company. Crown Data is also a useful channel for selling excess capacity of Mason Dixon's mainframe computers. Time-sharing service is utilized by several local activities near Kingsport including the computer-directed programs of the Upper East Tennessee Education Cooperative.[64]

In little more than a decade, Mason Dixon was able to develop, implement, and refine a network of on-line and batch-processing computer systems which were as advanced as any in the trucking industry. This automated information and control capability allowed management to increase customer service levels and to reduce operating costs. Prior to the efficiencies afforded by computer-based control, administrative costs were high and information

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[64]Tom Yancey, "Mason Dixon Computers Bring Efficiency in Tracing Shipments," Kingsport, Tennessee, Times-News, December 30, 1981, p. 2.

transfer cumbersome. The move to computers, more than anything else, made the marketing and serving of LTL traffic a profitable proposition.

5. TERMINAL MODERNIZATION PROGRAM

An important element of Mason Dixon's post-war marketing strategy was to develop the flow of LTL traffic. To implement this strategy, an extensive terminal modernization and fleet expansion program was undertaken. Terminal facilities were modified to allow more efficient cargo handling, or replaced when the old facility became technologically obsolete or physically too small to handle the volume of traffic. The Atlanta, Georgia terminal opened in 1970 as a replacement for an older, smaller facility. The new terminal was second in size to the Kingsport operation. It had 102 doors and cost more than $1 million to construct. It was to serve as the major traffic interchange point for all markets in South Georgia and Florida.[65] A western gateway terminal was built in Memphis, Tennessee in 1971. This fifty-door facility was strategically located on a twenty acre tract and had ample room for future additions.[66]

Other terminals were added to the system as a result of acquisitions. The 1971 purchase of A-OK Truck Lines included

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[65]"A Narrative History of The Mason and Dixon Lines, Incorporated," umpublished monograph, (Kingsport, Tennessee: Industrial Relations Division of The Mason and Dixon Lines, Inc., June 1975), pages not numbered.

[66]"Our Company's History," The Rolling Reporter, April 1976, p. 3.

terminals in Mobile and Montgomery, Alabama.[67] Eight terminal locations were added in 1973 following purchase of operating authority from E. J. Scannell and Nestor Bros.[68] Many of the facilities obtained through purchase of other truck lines were inadequate by Mason Dixon's standards. The major portion of the company's terminal modernization effort through the mid-1970s was targeted toward modernization or replacement of these acquired terminals.

Acquisition of all-points authority, a strategy pursued throughout the last half of the decade, required the addition of few new terminals. The carrier already had facilities located in the major traffic centers of the states they were authorized to serve. The primary objective of the all-points strategy was to expand the geographic area of markets served by the existing terminal system. Near the end of the decade, there were sixty-nine terminals and operating locations in the system.[69]

When the company announced receipt of new operating authority to serve Northern Florida, Alabama, Georgia, Louisiana, and Mississippi, they also announced plans to open sixteen new operating locations in

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[67]"Our Company's History," The Rolling Reporter, April 1976, p. 3.

[68]See earlier discussion of these acquisitions.

[69]"Mason Dixon--The Quality LTL Carrier," Sales Brochure, (Kingsport, Tennessee: The Mason and Dixon Lines, Inc., undated but probably 1978), p. 5, and "Mason Dixon, The Quality LTL Carrier," advertisement, Kingsport, Tennessee, Times, May 17, 1979, p. 6A.

the territory.[70] Earlier in the same year they had been granted authority which removed all restructions to serve intermediate points on their regular routes. The effect of that action was to allow service to eight hundred additional points in Alabama, Delaware, Georgia, Kentucky, New Jersey, New York, Pennsylvania, and Tennessee.[71]

The capital and organizational requirements of establishing a system of company-owned terminals to serve these rapidly expanding markets would have been impossible to meet. This problem was resolved by appointing commissioned agents to serve the new markets.[72] Reliance on commissioned agents for representation in new markets was reminiscent of the company's early years. During the Depression they had retained such agents in much of the northern territory. At that time there was too little capital available to own an extensive terminal system. Agencies were used in the early 1980s for many of the same reasons as before; they allowed rapid expansion and entry into new markets with a minimum of capital investment.

Another practice reminiscent of the 1930s was joint use of terminal facilities. In 1981, Mason Dixon announced that they would lease seven doors of the Kingsport breakbulk facility to Consolidated Freightways.[73] This practice was later expanded to allow leasing of

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[70] "Mason Dixon Will Add 16 New Truck Terminals," Johnson City, Tennessee, Press Chronicle, August 9, 1981, p. 23.

[71] Operation TurnAround Update, May 22, 1981, p. 1.

[72] Operation TurnAround Update, July 24, 1981, p. 1.

[73] Operation TurnAround Update, April 3, 1981, p. 1.

space at terminals throughout the system. In selling excess capacity, the company was able to convert unused terminal space into revenue and at the same time increase the possibility of generating interline freight, just as had been commonly done fifty years before.

The early 1970s, before the fuel shortage and economic recession, were prosperous times and Americans were optimistic. Out of this sense of optimism consumers bought durables and industrial firms made capital purchases. Evidence of Mason Dixon's optimistic outlook at that time lies in their plans to build a new corporate headquarters.

A primary reason that the freight terminal operation had been moved to the eighty-five acre tract on East Stone Drive was that the former facility became too small. With no room for expansion, a move was inevitable. The initial problem of having operational activities separated geographically from the corporate and administrative functions was resolved by completion of the Maintenance and Transportation Building in 1963. Still, many of the corporate staff activities continued to be located in the old Headquarters Building on Eastman Road. It was a long-standing goal, primarily encouraged by President E. William King, that a new corporate Headquarters Building be constructed on the East Stone Drive tract. Such a move would streamline the corporation by consolidating all management activities at a single location.[74]

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[74] "Mason Dixon Builds New Headquarters," Kingsport, Tennessee, Times-News, June 18, 1971, p. 1.

The Kingsport architectural firm of Allen N. Dryden, which had planned nearly all previous Mason Dixon structures, was retained to design the new Headquarters. Allen N. Dryden, Jr., commenting on the structure, said:

> it's not a monument or an ivory tower; it's basically a straight-forward building. For a conservative part of the country it may appear to be a monument, but the design philosophy and materials and construction techniques are very basic. What we tried to do was create an appearance that was in keeping with the public face of a major corporation yet would be completely practical and flexible to future needs. It has some showy features, but mostly it's designed to be a comfortable and efficient place to work. I worked closely with the Kings on that project and I think it is a true reflection of the sort of people the Kings are; function with class.[75]

The building was to be constructed of pre-stressed concrete panels with few large windows. The design was energy-efficient even before such considerations became popular. One "touch of class" mentioned by Dryden is the entry way. An open space extends the full height of the building and features a curved staircase. It creates a positive first impression of the structure and those who work therein.

When it was completed and formally opened in January 1973, the two-story structure had 55,650 square feet of office space and housed all corporate functions including the computer center. With working and parking space for 250 employees, it had one special design feature which had also been incorporated into the original

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[75] Allen N. Dryden, Jr., in interview with the author, Kingsport, Tennessee, April 16, 1981.

Headquarters Building on Eastman Road; a provision for addition of a third story should future requirements dictate.

E. William King said in an opening announcement, "For the first time in about four decades all general office functions will be under one roof. This consolidation should result in a much smoother, more efficient operation."[76]

There was no doubt, the new corporate headquarters and terminal complex was an attractive sight. It certainly attracted the attention of the Kingsport City Council. Soon, suggestions were being heard that the Kingsport city limits should be extended to include this valuable property. As the annexation offered no advantage to the company, and contained a considerable increase in tax burden, the Kings opposed the idea. This marked the beginning of a period of conflict between the Kings and the city of Kingsport. At issue was the manner and degree of Mason Dixon's responsibility for community support. The company is seen as an important local industry, a large employer, and a point of local pride. On the other hand, the community felt that the company had a particular obligation to contribute to local prosperity.

In spite of the King's opposition, the area was annexed. It took several years and suits and appeals as high as the Tennessee Supreme Court but the city won in 1978. Local rumors were widely circulated that Mason Dixon would relocate if the annexation were

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[76]"Plans Announced for Headquarters," The Rolling Reporter, July 1971, p. 1.

successful. They came to nothing. By 1982, King family resentment of the annexation had eased. A full page advertisement in local newspapers spoke of the company as the Tri-Cities home based carrier. "We grew up in the Tri-Cities. We're here to stay. We've shared 50 years of progress."[77]

6. DEREGULATION POSES MAJOR MANAGEMENT CHALLENGE OF THE 1980s

The Motor Carrier Act of 1935 and its subsequent amendments has created a framework of economic regulation unknown to transportation firms outside the U.S.[78] In the period of motor carrier growth following World War II, Mason Dixon and the other large common motor carriers prospered under the regulatory protection of the Interstate Commerce Commission.[79] While the truck operators occasionally may have chafed under the Commission's restrictions and individual firms sometimes deviated from the Commission's rules, in the main large carriers benefited from economic regulations and they knew it.

The question of an appropriate degree of regulation of the several elements of the transportation industry had been debated

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[77]"Going Places. Mason Dixon's First 50 Years," Johnson City, Tennessee, Press Chronicle, March 7, 1982, p. 20.

[78]Charles G. Burke, "Truckers Roll Toward Deregulation," Fortune, December 18, 1978, p. 85.

[79]"ICC regulation of the industry has produced over its 43 years a highly profitable and fairly stable sector of the economy, . . ." in "Trucking Deregulation Is Moving Fast," Business Week, November 27, 1978, p. 63.

among scholars, practitioners, and legislators for decades.[80] While the issue was widely studied and discussed, there was little actual movement toward changing motor carrier regulatory policy or practice prior to the mid-1970s. By then, the question had matured to the point that it could be classed as a public policy issue in Washington.[81]

When the Department of Transportation adopted a pro-deregulation posture in 1974, the fortunes and future of the nation's common carriers began to be substantially influenced by a growing trend toward deregulation of transportation. The Ford Administration introduced a proposed Motor Carrier Improvement Act in 1974;[82] however, opposition solidified and was sufficient to defeat the bill.[83] Administration emphasis shifted to other modes; the 4R Act of 1976 affecting the railroads and the Airline Deregulation Act of 1978 were passed. Both contained strong deregulatory elements.

In 1977, the Carter Administration announced a general policy favoring trucking deregulation.[84] In a statement made on June 23,

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[80]The fledgling ATA had opposed regulation in 1935. Since then various industry and government agencies have suggested modification or reduction of regulation, but these proposals lacked popular support.

[81]"Deregulation Threatens Motor Carriers," Fleet Owner, March 1975, p. 7.

[82]Bernie Swart, "Deregulation: The Motor Carrier Destruction Act of 1975?," Fleet Owner, April 1975, pp. 51-56.

[83]"Truck Deregulation Moving Fast," Business Week, November 27, 1978, pp. 63-72.

[84]"Truck Deregulation Rolling," Business Week, December 5, 1977, p. 100.

1979, President Carter claimed that economic regulation was at least in part responsible for inflation,[85] excessive governmental interference in private affairs, and the present energy shortage.[86] President Carter's deregulatory policy was advanced by his appointments to the administrative agencies. "Long a bastion of support for the existing regulatory system, the ICC began to shift gears [to change policy] in 1977 when President Jimmy Carter named A. Daniel O'Neal to the chairmanship."[87] O'Neal's appointment began a period when the ICC adopted a highly liberal interpretation of its Congressional mandate and began to ease the surface carrier's regulatory burdens using its administrative authority.[88]

Writing on the Commission's policy regarding routes and rates at the end of 1978, Jake Smith of Smith's Transfer observed, "The Interstate Commerce Commission will give you anything you ask for these days. We're going to get a hell of a windfall during this period of liberal giveaways that's going on."[89]

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[85]The President's Council on Wage and Price Stability released a 1977 report which purported to show that ICC control of entry into motor common carriage contributed to artificially high freight rates and unduly penalized consumers not only through paying more than they should for transportation but also through general price inflation.

[86]Nelson J. Cooney, "Deregulation--Trucking Aspects," Public Utilities Fortnightly, October 11, 1979, p. 98.

[87]Jill Wechsler, "Trucking Deregulation," Dun's Review, January 1980, p. 65.

[88]"Trucking Deregulation Is Moving Fast," Business Week, November 27, 1978, pp. 63-66.

[89]"Waiting For D Day," Forbes, December 25, 1978, p. 41.

Congress validated the new administrative policy and passed the Motor Carrier Act of 1980, marking the formal beginning of a new era in transportation regulation. The objective of the Motor Carrier Act was to place more reliance upon the forces of the marketplace, and less upon statutory mechanisms, in governing relations between motor carriers and their customers. This was to be accomplished by providing rate-making flexibility for carriers by reducing the ICC's degree of rate control and curtailing the collective rate-making activities of the regional rate-making bureaus. Additionally, the Act eased entry restructions and virtually assured freedom of entry into whatever territorial or commodity markets a carrier chose. Finally, this Act greatly reduced the number and degree of economic constraints imposed upon truck operators.[90]

Most often it is self interest, not the public interest, that determines an individual or group's position on a public policy matter. This can be seen in the public utterances of the parties concerned in the deregulation debate. Many carrier owners and managers still active in the industry remember the troubled conditions of the early 1930s and blame the hardships suffered then on a lack of economic regulation. They were violently opposed to all proposals of deregulation advanced in the late 1970s. Whether economic regulation, or the lack of it, is in any way connected with carrier stability or prosperity is not the point; a significant and influential

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[90] Donald E. Tepper, "Analysis of The Motor Carrier Act of 1980," Defense Transportation Journal, August 1980, pp. 5-100.

segment of the industry thinks it is and acts accordingly. Thus, the legacy of the 1930s continues to be felt. Shippers, for instance, who believe that an increase in competition in trucking will bring about lower rates, have supported deregulation. In stating the position of the National Industrial Traffic League, a shipper association, Sam H. Flint said:

> Shippers are convinced that . . . the prime result [of deregulation] will be higher railroad rates, on the other hand, intensified competition and elimination of uneconomic restrictions on operating authorities could result in lower motor carrier charges and perhaps better service.[91]

Those who perceive the risk of significant loss will be strongly opposed to such a proposal. The American Trucking Associations, representing at least the interests of the large regulated carriers, stated their opposition:

> If trucking is deregulated, the transportation scene will be in a mess in a very short time. The big shippers with economic clout will take advantage. Other shippers will suffer discrimination, prejudice and preference between persons, places and commodities. Shippers to small communities--and even those to the core of many large cities where traffic congestion eats up labor charges--would start to lose their motor carrier services or pay much higher rates. Then the hue and cry would be for regulation again.[92]

Another official ATA statement came from William J. Bresnehan:

> While some problems do exist, deregulation is an ill-conceived panacea which cannot begin to cure the problems

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[91]Sam H. Flint, "Shipper's Viewpoint," Public Utilities Fortnightly, October 11, 1979, p. 100.

[92]Nelson J. Cooney, "Deregulation--Trucking Aspects," Public Utilities Fortnightly, October 11, 1979, p. 99.

> of the transportation industry. Most deregulation arguments are sweeping generalizations with no credible evidence to support them. They do grave injustice to industries and personnel which have contributed greatly to the finest transportation system in the world, and the only one of consequence still in private hands.[93]

Business Week provided a perspective which explains the interest of the Teamsters:

> For years the International Brotherhood of Teamsters has been strong enough to win much of what it wanted in contract talks with the trucking industry, partially because the industry lacked unity. But now the proposals for deregulating the industry could weaken the Teamster's grip on trucking and thus the union strongly opposes deregulation. . . . Analysis on all sides agrees that deregulation would cost some teamsters their jobs, . . .[94]

Teamster President Frank Fitzsimmons was blunt: "Direct action, violence and periodic shutdowns will become the rule if Congress votes for deregulation."[95]

Mason Dixon veteran Martin Long put the entire deregulation issue into perspective. "Without regulation you have chaos, without a certain amount, that is. I suppose it's on a shifting balance line. If it were on a fixed line, someone would have figured it out long ago."[96] In this comment he recognized that regulation is responsive

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[93] William J. Bresnehan, "Forward" to American Trucking Trends, 1975, (Washington, D.C.: American Trucking Associations, Inc., 1976), p. i.

[94] "How Deregulation Affects the Teamsters," Business Week, November 27, 1978, p. 71.

[95] "Already Caught In a Diesel Crunch, Deregulation Threatens More Chaos," The International Teamster, July 1979, p. 3.

[96] Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

to changes in the national economy and the competitive environment. Truck line operators must adjust to these regulatory changes and market shifts if they are to survive and prosper.

Market Entry

Interstate Commerce Commission policy in the post-war years was that the level of competition in the motor market could be managed by controlling the number of carriers participating in that market. Too many carriers would create excessive levels of competition. This was contrary to the public interest because all carriers would be denied an adequate assured level of profit. The Commission, therefore, tightly controlled issuance of new Certificates of Public Convenience and Necessity--carrier growth and entry into new markets were most often accomplished through purchase of existing operating authority.

After the Commission's change of leadership and policy in 1977, it became much easier to obtain new operating authority. Writing in 1980, Transportation Consultant Colin Barrett observed, "Well over 95 percent of all operating rights applications are currently being granted."[97] The Supreme Court also seemed to favor this more liberal policy. As early as 1975, the Court had begun resisting the idea that additional competition in trucking markets was undesirable. Justice William O. Douglas endorsed the Commission's efforts to

[97]Colin Barrett, "Myths in the Deregulation Controversey," Distribution, April 1980, p. 70.

put "benefits of competitive service to customers" ahead of "the discomforts existing certificated carriers could feel as a result of new entry."[98]

Mason Dixon's growth strategy had been based upon purchase of desired operating authority from other carriers. Expansion was at a controlled rate; each acquisition was fully integrated before additional authority was sought. That strategy was prudent in a time when growth was paid for by purchasing other truck line's authority. With the change in National Transportation Policy and subsequent changes in legislation, it was no longer necessary or even desirable to grow through acquisition. New operating authority could be obtained for no more than the cost of filing an application. Mason Dixon's executives recognized an opportunity in the new National Transportation Policy.

In 1980, a dual-approach program of territorial expansion was undertaken. In one approach the company sought blanket authority in states already served; in the other it applied for operating rights in new states. In June 1981, it received all-points authority for Ohio and Indiana and opened twelve new agency terminals in those states.[99] In August 1981, approval was received for 11,565 miles of additional routes consisting of all-points authority in Tennessee,

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[98]"Court Pushes More Truck Competition," Fleet Owner, February 1975, p. 29.

[99]"Business Beat," Kingsport, Tennessee, Times-News, August 16, 1981, p. 9-D.

Alabama, Mississippi, Georgia, North Carolina, Virginia, Louisiana east of the Mississippi River, and the panhandle of Florida.[100] In September 1981, new authority was received from the states of Minnesota, Iowa, Missouri, Arkansas, and the remainder of Louisiana. This territorial expansion required the establishment of seven additional terminals to serve the new market area.[101] This expansion was swiftly followed by taking the final step; the rest of the Western states were added in March 1982. At that point, Mason Dixon had all-states authority.[102]

The reason behind the company's abrupt change in expansion strategy was that it wanted to capitalize upon an advantageous situation while the opportunity was available. George Maiden recalled, "We figured that the ICC would roll back a little, that it would get harder to receive authority. So we wanted to get it, to get in, before they tightened up again."[103]

In the first forty-eight years of corporate life Mason Dixon's route structure had grown to cover parts of twenty states and the District of Columbia.[104] Then, in less than a year, market coverage

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[100]"Mason Dixon Will Add 16 New Terminals," Johnson City, Tennessee, Press-Chronicle, August 9, 1981, p. 23.

[101]"Mason Dixon Expands Territory," Johnson City, Tennessee, Press-Chronicle, September 15, 1981, p. 15.

[102]"Mason Dixon Lines Run Coast to Coast," Johnson City, Tennessee, Press-Chronicle, March 7, 1982, p. 1.

[103]George A. Maiden in interview with the author, Kingsport, Tennessee, August 10, 1981.

[104]Rotary Club of Kingsport, Past, Present, and Future, (Kingsport, Tennessee: Rotary Club of Kingsport, Tennessee, 1978), p. 73.

expanded to include all forty-eight contiguous states. Assembling an operating department capable of offering coordinated service throughout the new territory constitutes one of the company's major management challenges for the 1980s.

Price Competition

The second major element of economic regulation to be relaxed dealt with motor carrier ratemaking procedures. Since passage of the Motor Carrier Act of 1935, common carrier rates had been set through the collective action of regional rate bureaus. Carriers generally refrained from publishing individual action tariffs. These two conditions produced a rate schedule which was high enough to assure survival to the least-effective carriers and not subject to any material degree of price competition. This system was accepted by all concerned: shippers, carriers, and regulatory agency. In fact, this pricing structure was encouraged by the ICC:

> Traditionally, the commission tended to believe that the public convenience and necessity could not possibly be served by price competition, since--in its view--such competition would undermine the financial health of existing carriers. Indeed, truckers already in the business were not allowed to lower their rates even if they wanted to--in order, say, to attract off-peak traffic or fill up an otherwise empty truck on its return run.[105]

Railroads sought to recapture market share through introduction of Trailer-on-flatcar (TOFC) service in the mid-1950s. By offering the flexibility of motor service with the low cost of long haul rail

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[105] Charles G. Burke, "Truckers Roll Toward Deregulation," *Fortune*, December 18, 1978, p. 76.

movement, this coordinated transport plan was successful in diverting traffic from motor carriers to rail. This event "caused the motor carriers to take a hard and serious look at the carrier's cost based on service performed."[106] This reappraisal "led motor carriers to the conclusion that the rate structure would have to be revised to more nearly reflect the cost of transporting different segments of traffic."[107] Industry leaders and regulators sought to develop a basis for a new, more representative rate structure. But, as late as the early 1970s, no consensus could be achieved.[108] ICC policy changes during the 1970s allowed for both greater freedom of entry and rate-making flexibility. The effect of the policy change and later legislative change, has been to substantially increase the degree of price competition for traffic.

Several historical parallels may be drawn between the early 1980s and the early 1930s. Now, as then, the nation is experiencing a period of economic recession. Unemployment is high. People, as an alternative to unemployment, are seeking to enter the trucking business. A relative lack of regulatory barriers makes market entry simple. The consequences of these conditions are 1) the recession causes a reduction in the overall level of demand for motor

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[106] Glen Brown, "Understanding Motor Carrier Rates," Distribution Worldwide, September 1974, p. 48.

[107] Glen Brown, "Understanding Motor Carrier Rates," Distribution Worldwide, September 1974, p. 49.

[108] "Truckers Fight for New Rate Base," Business Week, July 22, 1972, pp. 68-69.

transport; therefore, new entrants are underutilized, 2) this excess capacity condition, coupled with rate-making flexibility, has led many truckers to cut their prices in order to attract business. The effect has been to depress TL rates down to a level approaching marginal cost of service. 3) Since many of the entrants to the market have little knowledge of management or economics, the danger is that they will price their services too low, and, in the long run, force themselves into failure. Unfortunate as that may be, these operators also force others to match their unreasonable rates and thereby contribute to an even greater number of bankruptcies.

Mason Dixon has been affected by this interaction between the national economy and national transportation policy. The result has been a change in corporate pricing policy to accompany the previously discussed change in expansion strategy. E. Ward King was remembered by C. Grier Beam, founder of Carolina Freight Carriers, as a man who supported the American Trucking Associations and the rate bureaus.[109] As noted in Chapter IV, King did not believe in cutting his price in order to capture additional business. While it was King's personal policy not to deviate from the bureau system of setting rates, some company executives sought to conduct the conferences into a new, more rational pricing strategy. Charles D. Hardesty was a leader in this movement. He saw three primary problems in pre-deregulation pricing:

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[109]C. Grier Beam in interview with the author, Cherryville, North Carolina, April 7, 1981.

1) a lack of a common basis for setting prices, 2) inequities in the rate schedule, and 3) reluctance on the part of the ICC and some shippers to make progressive adjustments. He commented:

> I'll tell you what I learned from thirty years of pricing in this business; there's a terrible misnomer in the area. Before motor carriers were regulated they simply copied railroad schedules. Everything was based on their operating facts, not ours. Their [cost] curves were entirely different from ours. [After regulation] we basically maintained the same system with a few modifications. We then had a pricing system that literally over-priced half our traffic and under-priced the other half. We were charging users rates on some traffic based upon averages. . . .
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> I really got concerned about our rate structures. I just knew that there was something fundamentally unsound about that pricing system. The part of your market that you over-price, something is going to happen to it. It's going to erode and you are going to be left with the under-priced part. I'll tell you, I got worried.
>
> We finally got some of the other companies interested and we formed a committee down in the Southern Conference. We finally made a study, but we had a hell of a time getting the carriers to agree to at least try to pursue some differential type [sic] pricing. Cost-oriented, I call it differential for lack of a better word. . . .
>
> I spent hours and years in deliberation in the different bureaus. Different groups arguing among themselves, but all of us trying to cope with the problem. We got knocked out every time we could come up with a concept. The Commission would knock us down because they construed it as discrimination if we wanted to raise the rates over here twenty percent and lower some others by two percent. The NIT [National Industrial Traffic] League had their Small Shipment Conference [fighting us] and all the small shippers were losers under the old set-up. Hell, we charged them the same thing for a 500 pounder as for a 15,000 pounder from here to there. We charged the same thing from Atlanta to New York as we did from Atlanta to Scranton. Same milage but two different worlds [as to] what it cost. So, there were a lot of variables in the costs but no variables in the rates.[110]

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[110]Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

Passage of The Motor Carrier Act of 1980 gave Mason Dixon the pricing flexibility needed to move rapidly toward a cost-oriented rate schedule. This price strategy was part of an integrated market offering of services and prices tuned to shipper's needs. Marketing Vice President Luther McLain told of the establishment of the company's first such offering, the MADCON program, earlier in this chapter.

E. William King provided an overall appraisal of the MADCON experience:

> MADCON was a discount rate schedule tied to the use of consolidation and distribution centers. Large volume shippers were able to get lower rates. This quantity discount plan was introduced by Mason Dixon. It was originally filed as an individual issue tariff--other carriers weren't too pleased because it was seen as price cutting. There were lots of "me too" filings and things got to the place where the idea was applied to individual warehouses and even individual stores; it got out of hand. Mason Dixon still offers the rate, but we are tightening up on its application and getting more in line with the rest of the Conference. There is no future in starting rate wars.[111]

Newton Graves, Vice President, Marketing, for Yellow Freight Systems, characterized Mason Dixon's MADCON package as one of the first examples of price competition during the period when the Interstate Commerce Commission began to move toward deregulation.[112] If so, Mason Dixon was merely a leader in the trend toward making low price the leading element in the marketing mix. The emphasis on

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[111] E. William King in interview with the author, Kingsport, Tennessee, August 11, 1980.

[112] Newton Graves in conversation with the author, Macomb, Illinois, March 10, 1982.

price is a major change in motor carrier marketing strategy. Industry observer D. Daryll Wyckoff reports:

> It seems like only a few years ago, shippers said price was not important. Now it seems like it is the only thing that is important.
>
> Formerly, the motor carrier product was not very price differentiated and the shippers were looking for points of product differentiation. The result was that the carriers pushed themselves to produce more service product for the price they were charging. And these extremely high levels of service became the accepted product. . . .
>
> All of the previous market research in the motor carrier industry, no matter how carefully it was done, has probably been invalidated since the regulatory change. It was tainted with implied restrictions on price and product options under the previous regulatory regime.[113]

In 1982, the rapidly changing rate schedules created confusion for all concerned. Ralph Baldock of Mason Dixon observed, "I know no other industry as large and as complex as we are where top management knows so little about the pricing. Of course, we have the rate bureaus and we know how rates are made, but hardly any of us, if we are called upon by a customer, could tell what the rate is."[114] Such an ignorance of rates is no particular hardship, feels Newton Graves. "No one knows what the rate is, but it doesn't make much difference because someone will soon cut it."[115]

Increased price competition forced carriers to develop rates based upon costs. The problem that existed in 1981 was that the

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[113]"Motor Carrier Industry Resembles Science Fiction: Harvard's Wyckoff," Transport Topics, March 29, 1982, p. 8.

[114]Ralph E. Baldock, Executive Vice President, in interview with the author, Kingsport, Tennessee, April 14, 1981.

[115]Newton Graves in address to Chapter 305, Delta Nu Alpha Transportation Fraternity, Macomb, Illinois, March 10, 1982.

rate system lacked structure. As Charles Hardesty observed:

> We are getting to a cost-oriented rate structure the wrong way in my opinion. We could have done what we are doing now with order, instead of chaos. It's just chaos out there now; every carrier has got his own little scheme. What we need less of is more tariffs. We already have too many. Shippers don't know from one day to the next what rates they will have from different carriers and some of them are getting up tight about that. Now, they do like the rate cuts, some of them. There are some that don't even like that. It's more problems than goodies.
>
> This is where I disagreed with the idea that we needed weight freedom and deregulation. We could have done the same thing; we could have produced an intelligent rate structure if the carriers could have agreed and gone to the Commission and got an understanding. Let's just build a rate structure that goes along with the cost of the service the guy is buying. What's wrong with that? But, for one reason or another, we never could do that and now with deregulation we are going out there cutting the _____ out of each other. It's chaos.[116]

7. MARKETING AND OPERATIONS UNDER DEREGULATION

When profitability declined in the post-deregulation period, Mason Dixon's executives sought to return to the basics of motor carrier management: to re-emphasize activities and techniques that had proven profitable in the past. They sought to increase revenue by various sales campaigns, mostly based on paying employees a commission for sales leads that resulted in additional traffic. In the Truck Load Commission Program of fall 1981, the company paid $1,230 in commissions to generate an additional $62,769 in operating

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[116] Charles D. Hardesty in interview with the author, Kingsport, Tennessee, August 13, 1981.

revenue.[117] In a Truckload Incentive Program in spring 1981, 170 employees were paid finder's fees of $25 for each load they helped secure. Payment was made to people from all departments: drivers, clerks, and secretaries.[118] The campaign produced a total of 416 additional loads and increased operating revenue $518,000.[119] An example of the publicity given these employee incentive programs appeared in the company newsletter:

> ERIC SANDBERG (Burlington Terminal Manager) wanted us to know that about three weeks ago one of their city drivers, LOU PERFIDIO, brought a sales lead to our salesman, BILL DAHMS. This referred to a Schollar Bros. in Elmwood, NJ. Bill quickly followed up on the lead--going to their offices in Philadelphia and selling Schollar Bros. on Mason Dixon. They were impressed and began to turn on the freight. Their only desire was for good service. By a super team effort (including JOHN LOMBARD), this good service is being obtained. In the past three weeks, MADL has gotten $6,500 in additional revenue from this new account.[120]

One objective of the marketing effort, in addition to increased revenue, was to contribute to operational effectiveness by seeking more balanced traffic flows. In 1980 and 1981, traffic from the East and South, particularly Tennessee, especially was needed. Mason Dixon adopted a Tennessee Department of Tourism campaign and distributed posters and other promotional materials urging, "Follow Me

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[117] "Handshaker Incentive Campaign," Operation TurnAround Update, November 20, 1981, p. 2. Handshaker refers to the figures of Generals Lee and Grant shaking hands in the company logo.

[118] Operation TurnAround Update, March 13, 1981, p. 1.

[119] Operation TurnAround Update, April 3, 1981, p. 2.

[120] Operation TurnAround Update, October 2, 1981, p. 1.

To Tennessee."[121] Another revenue-producing effort was to ensure that all services specified in the tariffs and actually performed were billed properly. Better records-keeping on storage and detention increased accessorial charges $276,966 for the first three accounting periods in 1981. Closer monitoring of reweighing and inspection of shipments increased revenues $315,201 over the same period.[122]

In the search for new markets, Mason Dixon exhausted the possibilities for territorial expansion, although services into Canada and Mexico were considered.[123] Another option considered was expansion of the range of services offered. A tentative market test for air freight was conducted in 1981, but that market is exceptionally fragile and was found to be depressed as a result of the recession. More promise appeared to lie in development of an intermodal service offering.

Mason Dixon experimented with intermodal traffic as early as 1955 with the first piggyback service offered from Bristol, Virginia.[124] This service never developed because "service was too bad and the cost was too high. There was a time we used piggyback from Bristol

[121] Operation TurnAround Update, May 15, 1981, p. 1.

[122] Operation TurnAround Update, April 16, 1981, p. 1.

[123] "Mason and Dixon Launches Overseas Air Freight Service," Transport Topics, November 19, 1981, p. 5.

[124] "First Piggy-Backers," Bristol, Virginia, Herald Courier, November 15, 1955, p. 3.

into New York. It took a lot longer to make up a train than it does a truck."[125]

After years of inactivity, Mason Dixon again tried offering piggyback service in 1980. They entered into an "intermodal agreement" with Southern Pacific Railroad and Pacific Motor Trucking, a California trucking company owned by the railroad. Named "Fastrac-LTL," it involved the collection and consolidation of small shipments into trailer load lots which were shipped via piggyback from a Memphis consolidation point to the West Coast. Distribution was accomplished by Pacific Motor Trucking. Offering fifth morning delivery from Kingsport and sixth morning service from other Southern points, the system offered a 24 percent reduction in freight charges. This new service made use of the best features of rail and motor transport and was "something the shipping industry has been talking about for 20 years."[126] Mason Dixon began using this intermodal service on TL traffic in 1980 and expanded it to include LTL freight in late 1981. At that time no other truck line was offering a similar service for general commodities.[127]

As in the past, the companion of revenue increase was cost control. Cost reduction programs were of two general types--expense

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[125] Martin M. Long in interview with the author, Kingsport, Tennessee, February 11, 1981.

[126] Tom Yancey, "Fastrac-LTL Offers Real Bargain," Kingsport, Tennessee, News, August 21, 1981, p. M.

[127] Tom Yancey, "Fastrac-LTL Offers Real Bargain," Kingsport, Tennessee, News, August 21, 1981, p. M.

minimization and productivity increases. One expense minimization program, reduction of the claims ratio, was a major operational goal in 1981. An increase in emphasis on proper cargo control and documentation sharply reduced shortages.[128] This, in turn, contributed to a reduction of the claims ratio from 1.33 for 1980 to 1.19 in 1981, resulting in a savings of $106,000 in claims cost.[129] Fuel expenses were reduced by an estimated $308,802 in the first eight accounting periods of 1981.[130] These savings were accomplished through continued application of new technology and traditional driving techniques.

Productivity improvements resulted from re-application of previously successful programs. Company terminal managers were periodically charged with motivating their cargo handlers to pack trailers more densely. As explained in Chapter IV, extra cargo loaded on a trailer generates additional revenue but results in no appreciable cost increase. In the seventh accounting period of 1981, the average load per trailer was 24,519 pounds, the lowest level for the year.[131] A campaign was announced in the last half of 1981 to load more heavily to save operating expenses. The company newsletter exhorted:

> Let's work together to solicit and pick up more quality freight. Then stack it high and tight and full on our

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[128] Operation TurnAround Update, March 27, 1981, p. 1.

[129] Operation TurnAround Update, May 6, 1981, p. 1.

[130] Operation TurnAround Update, September 4, 1981, p. 1.

[131] Operation TurnAround Update, August 21, 1981, p. 1.

trailers. The dollars we save by our full loading efforts help ensure our security for the future. Fill'em up![132]

By the eleventh period, loads were averaging 27,184 pounds per trailer;[133] by the twelfth period, 27,922 pounds.[134] The company estimated that had loads been averaging at this level for the entire year, vehicle mileage could have been reduced enough to save $285,560 per period in operating expenses.[135] Additional operating cost savings were achieved by establishing new relay points at Chester and Rapine, Virginia. This action allowed more direct dispatching of traffic and allowed 80,000 pound loads to travel through Virginia, North Carolina, and Georgia, avoiding Tennessee's reduced weight limit.[136] The drivers were pleased with the new dispatch pattern. They called it Operation Slip Seat. The relay points were close enough to Kingsport and other major terminals that a driver could travel out and back in a single shift. This allowed drivers to avoid being on the road overnight.[137]

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[132] Operation TurnAround Update, August 21, 1981, p. 1.

[133] "Scoreboard," Operation TurnAround Update, November 6, 1981, p. 1.

[134] "Scoreboard," Operation TurnAround Update, November 13, 1981, p. 1.

[135] "How Important Is Maximum Loading?" Operation TurnAround Update, October 23, 1981, p. 1.

[136] Operation TurnAround Update, March 20, 1981, p. 1, and March 27, 1981, p. 2.

[137] Operation TurnAround Update, March 27, 1981, p. 1.

History Is Repeated

As Mason Dixon approached its fiftieth anniversary, many of the same challenges that faced the first management team were still present or had re-emerged. The national economy was in recession, the worst since the 1930s; some industry observers feared that economic deregulation would return trucking to the same unsettled conditions which prevailed in the early 1930s; and competition was becoming increasingly intense.

The future for Mason Dixon appeared bright because the organization retained the skills and optimism that were instrumental in overcoming the challenges of the 1930s. M. D. Hawk, one of the first company employees, who was associated with the King family and Mason Dixon for more than forty years, remembered a turning point in Mason Dixon's history:

> I remember one morning Mr. E. W. came out to the terminal. This must have been in about 1933; it was a Saturday morning. Everybody was in on a Saturday. He said he had an announcement to make. "Boys, we have it made now," he said, "We're getting one load of freight a day out of Kingsport and we have one load back out of New York City a day. We done got her made!"[138]

There have been many such turning points, or management milestones, in the first fifty years of the corporate history of The Mason and Dixon Lines, Inc. It has been the purpose of this paper to chronicle these significant events and to put them into a

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[138] M. D. Hawk in interview with the author, Kingsport, Tennessee, August 19, 1981.

management perspective. To the extent that the effort has been successful, today's motor carrier managers can employ the lessons of this company's history in resolving their own problems.

CHAPTER VI

SUMMARY AND CONCLUSIONS

1. SUMMARY

The Mason and Dixon Lines, Kingsport, Tennessee, was established in 1932 for the purpose of providing motor transport of products from upper East Tennessee to markets in New York. In spite of the Depression that gripped the nation, traffic grew rapidly. Within a year the route structure was expanded to reach from New York City to Knoxville, Tennessee, to Atlanta. In the succeeding fifty years that single route had been expanded to cover all points in the continental United States. In that half-century of growth the company had passed numerous management milestones; significant among these are 1) a program to generate backhaul traffic in the early 1930s, 2) recruitment of the best management talent to supervise new activities, 3) E. Ward King's purchase of the total proprietorship rights in 1939, 4) the post-World War II program of terminal construction and fleet modernization to serve as a basis for penetration of the New York-Atlanta freight market, and 5) efforts to increase operating revenues in the 1960s and 1970s through a program of territorial expansion.

The company's first management challenge occurred in its initial months of operation. In order to cover operating expenses it became necessary to develop southbound traffic flows to balance the available northbound movements. One of the founders, E. Ward

King, devoted his entire effort during the early months of 1933 to solicitation of needed backhaul traffic.

By the mid-1930s Mason Dixon was serving a segmented market. Typical of most other truck lines at that time, the company carried truck loads of material in support of the Southern textile industry. They were unusual in also seeking out less-than-truckload traffic and offering high priority service to attract and retain such business. In competition for traffic with rail express they found revenues to be high and rail service easily surpassed. The company began to develop a reputation for providing good service, the cornerstone of their post-war market development efforts.

During the company's early years, founders E. Ward King and Roy B. Moore shared executive responsibilities; Moore supervised operations while King handled the business functions; marketing, finance, and administration. Both King and Moore were working owners and came into personal contact with their employees. They sought to foster and promote the idea of a "Mason Dixon Family" by providing a work-related and social focus for the company's employees. In addition, Mason Dixon was one of the early promoters of a safety program which benefitted employees. A company personnel policy which was developed in the mid-1930s, and followed thereafter, was to promote from within whenever possible and to hire the best available specialist when it became necessary to hire an outsider. To develop a pool of executive talent the company hired college graduates at a time when most truck line employees, and owners too, were lucky to have graduated from high school.

A significant corporate event occurred just as it became clear that Mason Dixon would survive the Depression. E. Ward King, the optimist and entrepreneur, wanted to borrow capital and expand the fleet to take advantage of the boom in business he foresaw would follow the Depression. Roy Moore, on the other hand, had seen the failure of many firms that had borrowed money. He was content for the truck line to remain debt-free, to continue to operate on a scale which allowed him complete and personal operational control. This conflict in objectives led to the dissolution of the partnership in 1939 and left E. Ward King as the sole owner of Mason and Dixon Lines, Inc.

After he took control, King wanted the company to grow. Both geographic growth and market penetration strategies were pursued. Mason Dixon acquired Motor Transfer Company of Bristol, Tennessee in 1939 and Interstate Transfer Company in 1941. In 1942, the basic outline of the East-South route structure was completed; authority to serve Nashville was acquired through purchase of Cumberland Freight Lines. In three years King had added five new operating authorities to the original holdings. This route structure remained substantially unchanged until 1960.

Even with these acquisitions, the company was comparatively small. With only 227 employees at the end of 1940, personnel relations were carried on at the personal level. As the company grew, and as organized labor became stronger in the trucking industry, pressure increased for King to recognize the Teamster's union. King demanded an election to settle the issue; the union refused and struck the company at strategic points. The entire Mason Dixon system was paralyzed on November 5, 1941. American entry into World War II forced King to accede to the union's terms but thereafter company employees had to negotiate for many of the benefits that had previously been given freely. King felt betrayed by members of the "Mason Dixon Family" and the company executive structure from that time remained suspicious of the union's motives and actions.

Mason Dixon entered World War II with its fleet in better condition than most carriers. Increased weight limits had been passed in 1940 in Tennessee and Mason Dixon had purchased many new, larger trailers to take advantage of these increases. Due to rationing, no new equipment, terminals or routes were obtained during the war. By the end of the war the company was operating with worn-out vehicles, outmoded terminals, and a labor force of untrained replacements for regular employees called into military service.

Before the end of hostilities, King foresaw the tremendous post-war potential for the trucking industry. He realized that those companies that were prepared to serve the increased demand for truck transportation of consumer goods would reap ample rewards. He, therefore, resolved to strengthen his company as rapidly as conditions would permit. His master strategy was to 1) expand and modernize the system of terminal facilities, 2) replace the entire fleet of worn vehicles, and 3) recruit and train the personnel required to make the expanded system operate.

Modern terminals reduce materials handling time and cost. The result should be competitive customer service levels and profitable operations. Immediately after the war, Mason Dixon commenced a program of renewal, enlargement, and expansion of the terminal system. Continuing through the early 1980s, a number of structures were modernized each year. In much the same manner the vehicle fleet underwent a continuous process of replacement and improvement.

The post-war decision to modernize the vehicle fleet and expand the terminal system was essentially an operational matter, but it was made in anticipation of a successful sales effort that would expand substantially the volume of traffic. Not only was total traffic going to expand, but LTL freight was to be specifically developed to utilize the increased number and capacity of terminals.

In addition to physical facilities, it was necessary to rebuild the company's personnel structure after the war. People are important to motor transport because it is a labor intensive process. Previous employees, returning servicemen, and new college graduates were recruited. Owing to the corporate policy of promotion from within, many of Mason Dixon's current managers came from this post-war period of rebuilding.

King's postwar profit strategy was based upon maximizing operating revenues. This was to be accomplished through rate increases and greater market penetration. Mason Dixon supported most rate bureau price increases. Market share growth was sought through better customer service made possible by the new fleet and terminal facilities. In this the company followed the commonly held perception that customer service was the key to sales in motor transport. This idea was prevalent in the industry until deregulation in the 1980s. Some service aspects of the carrier's market development program in the 1950s were loss and damage reduction plans, introduction of piggyback service, and increased telecommunications capabilities to enhance traffic coordination and shipment tracing.

As Mason Dixon grew in the twenty years from 1938 to 1957, it became necessary to change the corporate organizational structure. Various regional realignments were made and by the mid-1950s the framework of the current corporate structure had emerged. This system was based upon regional managers who were responsible for all administrative action within specified geographic territories while a corporate staff at Kingsport provided centralized planning and strategy.

Congruent with a policy of promotion from within, the next generation of Mason Dixon's chief executives came from within the King family. In 1957, operational control of the truck line was transferred to E. Ward King's sons. Bill was appointed President and Jack named General Manager. At the time of their ascendancy, Mason Dixon was the seventeenth largest American truck line and had a consistent record of profitability. It was firmly established as a major carrier in the East-South market.

From 1941 to 1960 company growth had been achieved through market penetration. Under the direction of a new generation of leadership, the growth strategy for the 1960s and 1970s was one of territorial expansion. The most practical means to accomplish this purpose was through acquisition of other operating truck lines. The major acquisitions under this strategy were Robinson Transfer Motor Lines in 1958, a tank operation; Silver Fleet Motor Express in 1960, a Chicago-Birmingham general commodities line; Volunteer Motor Lines in 1965 opening the Memphis gateway; and Yankee Lines, Inc. in 1969, completing the Chicago, New York, South triangle. The effects of these acquisitions were 1) to bring about a revenue increase from $19 million in 1958 to $54 million in 1969, 2) to give Mason Dixon market coverage of the eastern third of the nation, and 3) to enable the company to offer single carrier service and be more successful in penetration of the larger market.

Several significant features of Mason Dixon's acquisition program were that the company 1) sought only carriers with complimentary route structures, 2) sought carriers that were in distressed condition and, therefore, commanded a lower sales price, and 3) acquired new firms slowly enough to allow each to be completely integrated into the system before the next was added.

A complementary marketing program was designed to increase the company's market penetration. The objectives of this effort were to 1) increase the share of high revenue producing LTL traffic and 2) facilitate greater directional balance. The primary thrust of Mason Dixon's marketing effort during the early 1960s was to increase gross sales; little effort was made to analyze the profit potential of individual traffic flows. Market conditions at the time were such that it seemed, "Anything we handled we made money."[1]

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[1]A. B. Bell, Jr. in interview with the author, Powell, Tennessee, April 9, 1981.

By the end of the decade it was clear that greater emphasis was needed on generating traffic with higher profit potential. In particular, LTL traffic growth was sought. The objective was to achieve a traffic mix of both large and small shipments and seek directional balance thus allowing more efficient fleet utilization and cost control. Addition of more operating territories and increased traffic volume were supposed to give more opportunities to create directional balance. These aims were not entirely met as management techniques were not developed to deal adequately with the increase in complexity of traffic flows.

The third element of the revenue increase strategy was diversification. In addition to the Mason Dixon Lines, Inc., and the Mason Dixon Tank Lines, the King family controlled finance, terminal, and real estate subsidiaries. E. Ward King at various times owned a truck dealership, a parts outlet, a pleasure boat sales and service business, and Southeast Airlines, an intrastate air passenger carrier. While some of these outside operations were profitable, none were as successful as the trucking companies.

If effective marketing can increase operating revenues, it requires effective operational management to retain a share of these earnings and produce a profit. The critical step is achieving cost control. The company sought cost control in four areas; 1) vehicle maintenance, 2) terminal construction and fleet modernization, 3) claims reduction and safety, and 4) computer applications. Although progress was made in each of these areas, the decade of the 1960s was a period of declining operating effectiveness for the truck line. Revenues were increasing rapidly but operating costs rose even more rapidly. The management challenge for the 1970s was to seek greater coverage of the territories acquired by purchase in the previous decade and to seek increases in profitability.

Corporate objectives for the 1970s were to 1) consolidate the position in existing territorial markets by expanding the regular route system to all-points authority, 2) acquire selectively smaller regional carriers for the purpose of expanding into attractive markets and to protect interline traffic, and 3) increase both the volume and proportion of LTL traffic. The purpose of this third objective was to maximize the profit obtained from operation of the extended route structure.

During this period market appeal continued to be based upon high quality customer service. The company undertook regular operational and organizational changes in an effort to increase and maintain customer service standards. A major corporate reorganization, accomplished in 1970, combined operations and marketing. A company statement, announcing the move, indicated that this consolidation of all functions relating to customer service was the first such move in the industry. This organizational pattern was employed through the remainder of the decade. Evidence of its success was that many other large truck lines implemented the same idea.

Mason Dixon's expansion program for the 1970s was designed to obtain greater coverage of territories already served. Operating rights were extended from Birmingham to the Gulf, from New York City north into New England and to western Pennsylvania. These acquisitions protected interline traffic. In the late 1970s the company began to seek all-points authority in the states currently served. This move opened new markets located outside the major commercial zones.

After deregulation in 1980, Mason Dixon sought and received authority to serve the entire continental United States. Service to the new market was performed on a limited basis--the perils of too-rapid expansion had been learned from the failure of other truck lines. Agents served these new markets in much the same manner as agents had been employed during the first decade of the carrier's existence. After deregulation became effective, the company stopped purchasing other truck lines and sought new authority directly from the Interstate Commerce Commission.

Mason Dixon sought to develop markets through application of the marketing concept--seek out customer needs, then serve those needs. MADCON was one example of the new marketing approach. It offered consolidation and distribution services for large shippers of LTL traffic. Further, these services were offered at competitive rates. One marketing manager for a major truck line observed that Mason Dixon's MADCON rate system was the first example of price competition in the new era of reduced economic regulation.[2]

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[2]Newton Graves, National Accounts Representative, Yellow Freight Lines, conversation with the author, Macomb, Illinois, March 10, 1982.

Economic and competitive conditions of the 1970s forced Mason Dixon to go beyond the traditional cost control techniques of vehicle utilization, backhaul balance, and materials handling efficiency. The decade demanded fuel conservation programs, computer applications, and a new system of freight handling terminals. In the first years of the 1980s, with deregulation in effect, new initiatives in marketing and operations brought the company's line employees into the effort to generate additional revenues and control costs. Incentive programs paid bonuses to employees for finding new traffic. Company executives began to re-emphasize traditional traffic management methods for increasing productivity, higher loading density, more efficient dispatching patterns, and claims prevention programs.

In its first half-century of corporate life Mason Dixon grew from a three-truck operation to become one of America's twenty largest motor carriers. Following 1973, however, revenues and profits fell. In 1981 and 1982, for the first time in its history, the company lost money. During the period 1932--1982 the company displayed the classic life cycle pattern; growth, maturity, decline. The major challenge facing Mason Dixon's owners and managers in 1982 was how to reverse this decline and return the company to prosperity.

2. CONCLUSIONS

Fifty years of survival is a long time considering the mortality rate of motor carriers. It is significant that Mason Dixon survived for that length of time; it is even more significant that the carrier was at one time ranked fifteenth largest in the nation. In the beginning Mason Dixon was not much different from many similar operations. It consisted of simply three people trying to make a living with a fairly new idea. Most of the young company's competitors operated much the same equipment, used similar type terminals, and served the same markets. Most of these early competitors and contemporaries have long since disappeared. What was different about Mason Dixon; how did that company manage to survive and prosper when so many others did not?

The reason for Mason Dixon's initial success was E. Ward King. This is not to suggest that Moore and Steele were inept managers. There is no indication of this. It is simply that King was an experienced businessman; he approached trucking as a business. He was more than a financial backer of the truck line; he was the primary driving force in the strategy for success during the company's first thirty years. He devoted his energies to management and administration of the business rather than operating vehicles as his partners did. It was King who went to New York City and solicited backhaul traffic. These accounts made it possible to achieve greater directional balance and gain a high degree of vehicle utilization. King's marketing efforts in generation of backhaul traffic were the key to the company's early survival. In addition, it was King's mechanical interests that lay behind Mason Dixon's maintenance policies. The modern, well-maintained fleet was instrumental in the company's ability to provide high quality customer service. This service, in turn, contributed to traffic growth.

As the primary administrative officer, it was also King's responsibility to establish personnel policies. His early practice of filling corporate vacancies with only the best talent available had a positive effect on the firm's performance. King hired talented subordinates and used them to good effect. W. D. McLain, Jack Dempsey, and Ewing Green, Sr. were as important to Mason Dixon's early survival and success as Moore and Steele had been. Finally, King's vision of the post-war increase in demand for motor transport and his resolve to build a strong fleet and system of terminals in order to be able to serve that demand were central to the company's post-war successes.

Mason Dixon's route structure during the period prior to 1960 was excellent. By concentrating on serving a limited market with high traffic the company built a strong base for later territorial expansion. In their territorial growth strategies subsequent to 1960, a controlled rate of growth allowed the company to integrate fully each acquisition into the overall system before another was undertaken. Thus, the company avoided the problems encountered by other truck lines when they expanded too rapidly.

Mason Dixon's controlled growth rate was due to the availability of suitable acquisitions and a management policy of making each new route prove itself profitable.[3] Being a privately held corporation limits a company's ability to raise capital through sale

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[3] W. F. Kestner in interview with the author, Kingsport, Tennessee, February 12, 1981.

of common stock. Capital constraints, however, did not force the Kings to defer any attractive opportunities. Don Good reported that the Kings had a credit line established with New York and Nashville banks which allowed them to finance whatever programs they sought to undertake.[4] Private ownership in this regard was not a limitation. Given E. Ward King's management style, he would have found the necessity of accommodating the interests of stockholders an undesirable situation.

During the 1960s and 1970s, the company grew in terms of territory covered, in terms of quantities of traffic carried, and in terms of services offered. It did not, however, achieve comparable increases in profits. The Appendix shows the company's operational and performance deterioration over the period 1954--1982. The company operated on the inertia created during the 1950s for close to a decade after E. Ward King retired. Then, in the 1970s, in response to economic recession, increased competition, inflation and fuel shortages, the rate of return declined markedly. When the industry changed again, and more profoundly, with continued recession accompanied by economic deregulation, the company no longer operated effectively. Operating revenues declined, costs increased, and return on investment fell to unacceptable levels.

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[4]Donald K. Good, retired Senior Vice President and Secretary, in interview with the author, Kingsport, Tennessee, February 10, 1981.

Mason Dixon's management during the 1960s and 1970s pioneered several marketing and operational improvements that were adopted subsequently by the rest of the industry. Introduction of MADIX in the 1960s made handling large volumes of LTL traffic both possible and profitable. This freight moved under relatively high rates because the cost of rendering the service was high. Owing to the light weight of these shipments the cost of pick-up and delivery, rating, documentation, and other administrative actions was high per unit of weight. Computerized freight management systems, MADIX being one of the first, changed all that. By using computer-based procedures to schedule, control, and rate LTL traffic it was possible for the carriers to reduce the cost of providing service and at the same time substantially increase the quality of customer service.

In addition to reducing the paperwork burden and minimizing delay of shipments, the MADIX system allowed traffic lane analysis which showed shipment profitability. The company's sales force then was able to develop a market strategy of targeting the most profitable traffic flows. Again, Mason Dixon was one of the first carriers to use this information to employ a market segmentation strategy.

A motor carrier's operating ratio relates operating expenses to operating revenues. It traditionally has been employed in the industry as an indicator of corporate health. The Appendix shows Mason Dixon's operating ratios for the years 1954--1982 gradually rising. In spite of introduction of innovative marketing and cost control programs, the company's average operating ratio had increased to the high 90s by the early 1980s. "There is general agreement among motor carriers that a company's stability and service are impaired when its operating ratio rises above 95 percent."[5] Clearly, Mason Dixon's operating performance had deteriorated and that standard was not being met.

The company's rate of return for the period 1960--1982 shows a significant decline with results averaging around 6 percent, and falling, in the early 1980s. See Appendix. By comparison, government securities were paying in excess of 12 percent at that time.

The corporate growth policy pursued during the 1960s and 1970s did not provide the desired results. In the final analysis, the company's rate of return declined as the size of its operation increased; costs increased more rapidly than revenues. The high quality customer service, so long the basis of Mason Dixon's marketing program, was costing more than customers were willing to pay.

The managerial lesson to be learned from this experience is that an effective marketing program determines the customer's service needs and ability to pay, then tailors an offering that meets these criteria profitably. Mason Dixon was providing a more costly service than their customers needed. The result was inevitable financial decline.

Deregulation of common motor carriage, coupled with the continued economic recession, brought about profound changes in the

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[5]Robert C. Lieb, Transportation: The Domestic System, Second Edition, (Reston, Virginia: Reston Publishing Company, Inc., 1981), p. 62.

industry. Conditions in the early 1980s paralleled the early 1930s. Relaxed entry restrictions and a high level of unemployment throughout the country resulted in an increased number of truck operations formed. These new entrants competed vigorously for reduced volumes of traffic. In most cases the new carriers could not compete on the basis of customer service. Predatory price competition became commonplace. Falling revenues forced many of the established truck lines into bankruptcy. The nation's answer to the problems of the 1930s was increased economic regulation. It remains to be seen whether the same treatment will be prescribed to correct the problems of the 1980s.

3. POSTSCRIPT

In January 1984, the King family sold The Mason and Dixon Lines, Inc. and Mason Dixon Tank Line to Central Transport, a Michigan trucking conglomerate. Mason Dixon was to retain its identity and be operated as a subsidiary.

At the end of March 1984, The Mason and Dixon Lines, Inc., filed a Chapter 11 bankruptcy petition. Employees were told that they must accept a 17 percent pay cut if the company were to survive. Drivers would either have to buy their vehicles or lease them from the company.

On April 9, 1984 the Teamsters union called a strike against Mason Dixon claiming that the bankruptcy was a sham and that the company was only trying to force their employees to accept a pay reduction.

The strike lasted into July 1984. By the time it was settled most of Mason Dixon's customers had begun to use other truck lines. The company made an effort to recover lost accounts but met with little success.

On December 3, 1984 The Mason and Dixon Lines, Inc., ceased operations and began the process of liquidation.

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APPENDIX

MASON AND DIXON PERFORMANCE SUMMARY 1932--1982

YEAR	OP REV	OP EXP	PROFIT	RATIO	WORTH	RIO
1932	25	21	NA	84.0		
1933	75	70	NA	93.3		
1934	166	153	NA	92.2		
1935	406	381	NA	93.8		
1936	630	610	NA	96.8		
1937	826	844	NA	102.2		
1938	1,209	1,086	61	89.8	135	.452
1939	1,760	1,431	63	81.3	218	.289
1940	1,918	1,603	8	83.6	234	.033
1941	2,210	1,857	4	84.0	406	.010
1942	3,019	2,466	83	81.7	343	.242
1943	2,950	2,563	66	86.9	334	.198
1944	2,813	2,405	8	85.5	230	.035
1945	2,984	2,526	45	84.7	268	.168
1946	3,627	3,008	146	82.9	554	.264
1947	4,387	3,647	114	83.3	677	.168
1948	5,821	4,729	451	81.2	719	.627
1949		data not available				
1950	9,037	8,309	713	91.9	1,427	.500
1951		data not available				
1952		data not available				
1953	12,413	11,799	254	95.0	1,680	.151
1954	12,407	12,116	84	97.7	1,764	.048
1955	14,499	14,176	93	97.8	1,875	.050
1956	15,128	14,128	435	93.4	2,258	.193
1957	16,573	15,275	664	92.2	2,900	.229
1958	17,655	16,835	446	95.4	3,299	.135
1959	20,512	19,092	890	93.1	4,167	.214
1960	* 25,504	24,880	449	97.6	4,650	.097
1961	* 28,717	27,099	1,219	94.4	7,014	.174
1962	* 32,141	31,078	726	96.7	5,922	.123
1963	* 33,075	31,185	1,439	94.3	8,565	.168
1964	* 35,095	34,123	388	97.2	7,577	.051
1965	* 37,657	35,921	734	95.4	8,496	.086
1966	39,387	36,980	1,164	93,9	9,527	.122
1967	40,127	38,133	1,474	95.0	10,900	.135
1968	46,052	43,917	1,282	95.4	11,213	.114
1969	55,588	53,937	483	97.0	14,142	.034
1970	55,916	54,497	345	97.5	11,732	.029
1971	65,263	62,328	1,501	95.5	13,147	.114
1972	75,268	72,109	2,047	95.8	17,899	.114
1973	90,625	88,384	1,368	97.5	18,290	.075
1974	103,308	100,381	1,328	97.2	17,697	.075
1975	87,819	87,455	27	99.6	17,952	.002
1976	109,101	107,527	1,229	98.6	19,988	.061

YEAR	OP REV	OP EXP	PROFIT	RATIO	WORTH	RIO
1977	132,948	127,943	2,311	96.2	32,623	.071
1978	168,610	162,132	2,601	96.2	32,628	.080
1979	184,079	181,053	875	98.4	34,219	.026
1980	176,823	174,194	299	98.5	33,117	.009
1981	178,070	176,878	(1,294)	99.0	29,939	(.043)
1982	149,014	157,507	(10,793)	105.7	24,570	(.493)

*Combined Mason Dixon and Silver Fleet statistics.

Source: TRINC Transportation Consultants, TRINC's Bluebook of the Motor Carrier Industry, (Washington, D.C.: TRINC Transportation Consultants, Inc., Annual).

VITA

Craig Allen Hollingshead was born in Sibley, Iowa on June 16, 1940. He graduated from high school in Nevada, Iowa in 1958. He received a Bachelor of Transportation Administration degree from Michigan State University in 1964, a Master of Business Administration degree from The University of Texas in 1970, and a Doctor of Business Administration degree from The University of Tennessee, Knoxville, in 1985.

He served on active duty with the U.S. Air Force from 1960 to 1969, primarily as a Transportation Officer. He taught Transportation and Logistics Management courses at Iowa State University (1972--1976), East Tennessee State University (1977--1978), and Western Illinois University (1981--1984). He returned to active duty with the Air Force to attend the National Defense University in Washington, D.C., in 1984--1985.

Mr. Hollingshead is a Certified Member of the American Society of Transportation and Logistics. He is also a member of the National Defense Transportation Association, Society of Logistics Engineers, and Delta Nu Alpha Transportation Fraternity.

He is married to the former Nancy Helen Fletcher of Urbana, Illinois. They have two children, Kelly J. and Eric S.