A Study of Sales Training within the General Aviation Industry

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A STUDY OF SALES TRAINING
WITHIN THE GENERAL AVIATION INDUSTRY
A STUDY OF SALES TRAINING
WITHIN THE GENERAL AVIATION INDUSTRY

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

CLYDE ELI HARRIS, JR., M.B.A.
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The University of Arkansas
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CHAPTER I

INTRODUCTION

I. THE PURPOSE OF THE STUDY

The purpose of this study was to analyze (1) the manner in which the five leading utility aircraft companies conducted their sales training activities; (2) the reasons for their methods of sales training; and (3) the problems encountered in the sales training programs within these organizations.

To determine the current status of sales training within the industry, the study also considered other factors involved in the marketing of utility aircraft from 1957 to the present. These factors include such items as company history, product differentiation, market structure, channels of distribution, market research, and organization of the sales departments of the five leading firms. Analysis of these items provides a better understanding of the need for sales training and the specific sales training programs.

This paper may be of importance to those students of marketing who seek a better knowledge and understanding of sales training and of the ways that sales training is being conducted in the utility aircraft industry.
II. THE MEANING OF SALES TRAINING

The main emphasis in this study was directed toward the subject of sales training in general, and toward sales training within the utility aircraft industry in particular. The sales training programs discussed were those of the manufacturers; no attempt was made to analyze any of the separate supplementing activities of the middlemen in the channels of distribution.

For purposes of this thesis general aviation is defined as that part of civilian aviation excluding airline operations. Included in the general aviation category are aircraft used for agriculture, pleasure or sport, instruction, air taxi and air freight, and business. Figure 1 shows the overall structure of aviation in the United States.

The term utility aircraft refers to a type of aircraft which is certified to carry both personnel and cargo. Most aircraft used in general aviation are of the utility type. These planes also are referred to as light aircraft.

Before one can understand the meaning and importance of sales training, he must first understand the definition of marketing, and the definition of selling as one of the functions of marketing.
FIGURE 1

STRUCTURE OF AVIATION

Source: Aerospace Facts and Figures 1962
Most of the definitions of marketing state that it is the business or activity of buying and selling. Marketing has been defined in various ways by several authors. Phillips and Duncan indicate that "Marketing— which is often referred to as 'distribution' by businessmen—includes all the activities necessary to place tangible goods in the hands of household consumers and industrial users, excluding only such activities as involve a significant change in the form of goods."¹ According to Wroe Alderson, "Marketing ... is the exchange taking place between consuming groups on the one hand and supplying groups on the other."² Converse, Huegy, and Mitchell point out that "Marketing includes the activities involved in the creation of place, time, and possession utilities."³

No one can deny that form utility is an important aspect of production, but even here the sometimes "unseen" selling function is geared to, or aimed at, this


sovereign demand, based upon market information available at the time.

Regardless of how marketing is defined, the functions of exchange, buying and selling, must be included in the definition. Hence, one must conclude that selling, as a function of exchange, is one of the most dynamic, if not the most important, function of marketing, or perhaps of economics.  

Selling, as defined by Nystrom, "is the process which stimulates demand or desire, finds the buyer, advises the buyer, and negotiates with him to bring about a transfer of title." Webster defines a sale as an "act of selling; a contract whereby the ownership of property is transferred from one person to another for a sum of money or, loosely, for any consideration.

Selling has been generally considered an important function. It therefore would seem to follow that preparation for selling, or sales training, must also be an important factor in any economy which is based upon the

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5 Ibid., p. 24.

organizing principle of consumer sovereignty. As a leading exponent of sales training said, "if selling is such a force, the proper training of men and women in salesmanship is important and worthy of our best efforts."^7

Sales training, as defined in this paper, refers to an organized attempt by the management of a business organization--in this instance a utility-aircraft manufacturer--to advise, assist, prepare, discipline, teach and educate the organization's selling personnel at all levels so that better results--greater sales with less effort at lower costs--can be attained. This broad objective can be broken down into more specific objectives for individual firms; however, the overall goal cannot be overlooked by any organization.

Sales training appears to be an integral part of business organization and marketing management. Many industries have already recognized it as an important sales management tool.

Current data indicate over 300,000 sales jobs are open each year.^8 Even more significant is the fact that

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potential sales employees are becoming increasingly aware of the value of sales training—so aware, in fact, that they are skeptical of joining a firm which does not have a good sales training program. New sales employees are looking for professional help, which must come in the form of an adequate and continuing sales training program. Sales training in the general aviation industry appears to be important for three reasons:

1. The shift from a physical production orientation to a marketing orientation

2. The changing attitude toward professionalism in selling

3. The growth potential which lies within the industry

The emergence of a seller's market after World War II led many to focus their sole attention on physical production and on the improvement of physical production methods. As time passed, and as greater technological gains solved many physical production problems, additional emphasis was placed on the marketing process.

The "Distribution Revolution" also caused businessmen to reappraise their selling activities along professional lines. R. S. Wilson, former head of Goodyear Tire and Rubber Company, indicates the growing importance of professionalism in selling. He states, "The day of
the peddler, the drummer, and the *caveat emptor* (let the buyer beware) salesman is gone.... In their place is arising a class of professional salesmen who apply to their calling the same ethics and study as a true professional in any line; men who set service above immediate reward; men who respect the honor of their calling as highly as does any physician or lawyer."

The potential growth of general aviation has become evident since World War II. This growth is likely to continue as more individuals and businesses come to realize the many economies of this rapid and safe mode of transportation.

The significant increases in the general aviation industry reflect the need for continued emphasis on the marketing functions. The selling process is one of these functions, and sales training is the backbone of the process. In addition, there are many unique characteristics of the product, the market, and the salesmen which

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makes sales training an even more important study in the utility aircraft industry.

III. METHODOLOGY

The five firms interviewed in this study—Aero Commander, Incorporated; Beech Aircraft Corporation; Cessna Aircraft Company; Mooney Aircraft Corporation; and Piper Aircraft Corporation—were chosen because they manufactured almost all of the utility aircraft produced in this country. For example, in 1961 the firms in this study produced 6,635 units out of the total of 6,778 units. This production constituted approximately 98 per cent of the utility aircraft unit production. In dollars, these firms sold $123,261,000 out of the total of $124,323,000 in 1961. Their dollar sales also constituted approximately 98 per cent of the total sales for all utility aircraft in the United States.¹¹

Most of the general information concerning types of products, hours flown, miles flown, sales, growth potential, and market forecasts came from trade periodicals, aircraft industry publications, and Federal Aviation Agency data. A survey of secondary sources also

was made in an effort to obtain the foremost current thinking on sales training. This general sales training information came from leading marketing and sales management articles and publications.

Specific information concerning the sales training programs in effect in each of the five firms was gathered by a series of letters, phone calls, personal interviews, and actual attendance in sales training schools and programs. Every effort was made to gain a true and accurate picture of the sales training activities within the chosen firms. Questionnaires used in the personal interview phase are included as appendices to this dissertation.

IV. LIMITATIONS

The study was largely descriptive; however, every effort was made to compare and relate the study to the most generally accepted ideas and techniques which were available in marketing literature.

Sales training has received a late start in the utility aircraft industry. Because of the dynamic nature of the industry, additional studies of marketing activities, particularly sales training, might prove worthy in the future.
Many uncontrollable variables are ever present in the business world. For this reason no set program or step-by-step process can be developed which will give infallible results. Conclusions and recommendations in this paper, then, are based in part on opinions and observations which were formulated during the course of the study.
CHAPTER II

GENERAL MARKETING INFORMATION
ON THE INDUSTRY

In order to appreciate the significance of sales training within the general aviation industry, the reader must have some appreciation of the general development of all marketing within the industry. The early growth period of an industry is usually characterized by emphasis on manufacturing. However, as the industry tends to mature and competition becomes more developed, the competing firms begin to see the necessity for more complex and refined methods of marketing.

I. THE HISTORY AND DEVELOPMENT OF THE GENERAL AVIATION INDUSTRY

Flight has long been a phenomenon which has mystified man. Early attempts to conquer flight were primarily the result of man's curiosity, imagination, and experimentation. Since man was interested in flight as an experimental or adventurous activity, it is probable that he gave little thought to its possible commercial uses. Many looked upon the Wright Brothers' flight at Kitty Hawk, North Carolina, on December 17, 1903, as a successful experiment, but few realized that an important
transportation industry was being born. Six more years would pass before the first aircraft was sold.¹

Since the time of the Wright Brothers' flight, the general aviation industry has witnessed many drastic economic fluctuations. The World War I period brought all-time high production figures. A high of 14,020 units were produced in 1918, but the level skidded to 780 planes in 1919. This was only the first of many fluctuations which would plague the aviation industry.

After World War I the government sold many surplus military aircraft at drastically reduced prices, and during the years of 1919 to 1924 practically nothing was produced in the small aircraft industry. There was an upswing in aircraft manufacturing from 1925 to 1929; however, the Depression of 1929 caused another downturn in production.

Another upward Cyclical movement started in 1936. Aircraft production nearly doubled in the 1939-1940 period. Civilian flight training in the years prior to World War II accounted for most of this growth.

During the period from 1942 to early 1945, the government stopped all civilian aircraft production. During this period the industry manufactured only military aircraft. United States aircraft production reached a high of 95,272 units in 1944. In 1946, when materials and parts were released once again for civilian production, and when military pilots were returning home, civilian aircraft production reached a high mark of 35,000 units. However, once again the flood of war surplus planes on the market, many of which were training models unfit for business use, caused production to fall. During the years 1948-51, the industry saw an even greater decrease in production due to certain restrictions imposed by the government during the Korean Conflict.

From the mid 1950's to the late 1950's, unit production gradually increased. The greater increase, however, was in dollar sales volume. The dollar increase was caused partly by inflation and partly by the sale of more expensive aircraft.² The year 1960 proved to be the highest dollar-volume period on record. The total value of all civilian aircraft sold in 1960 was $1,240,978,000;³

²Ibid., pp. 10-40.
general aviation's share of this 1960 market was approximately $201,627,000\textsuperscript{4} in retail value.

Figure 2 bears out the production fluctuations discussed earlier in this section.

The study revealed that marketing executives within general aviation felt that the industry had not reached its maximum potential. L. L. Thomason, Director of Air Age Education for Cessna Aircraft Company, pointed out that the aviation selling job had only begun. "The job has not been done. A recent survey shows that only one adult in seven has ever been in an airplane of any kind."\textsuperscript{5} He further stated, "Until the public knows and understands private aviation, its present position, its possibilities, its needs and problems, we will never realize the full benefits that the private plane is capable of providing."\textsuperscript{6} W. T. Piper, Jr., also presented this view: "As we have stated on previous occasions, General Aviation is destined to be a big industry, but

\textsuperscript{4}This figure was derived from the manufacturers' net billing prices using an average markup of twenty-five per cent.


\textsuperscript{6}Ibid.
U. S. AIRCRAFT PRODUCTION, 1909 to 1961
like any similar business, has its growing pains which are not likely to be cured overnight. 7

II. PRODUCTS OF THE FIVE LEADING FIRMS IN THE UTILITY AIRCRAFT INDUSTRY

At the time of the study, forty different airplanes (thirty-nine piston-type and one jet) were being produced by the five companies. Plans included the introduction of additional jets, and of an all plastic single-engine plane. Further product design along turbojet, jet and VTOL (vertical take off and land) lines seems likely.

Though some unique uses for the helicopter do exist (such as patrolling, prospecting, mapping, controlling traffic, and search and rescue work), its role has been a minor one. In 1960 the Federal Aviation Agency in its study "Project Hummingbird" 8 investigated the various uses for the helicopter and other vertical

7 W. T. Piper, Jr., Vice President of Piper Aviation Corporation, "Piper Aircraft Corporation and General Aviation" (an address presented before the Aerospace Analyst, New York, May 1, 1963).

take-off and landing aircraft and forecasted an increase in the use of the helicopter in general aviation.

J. T. Geuting, Jr., Manager of the Utility Airplane Council of the Aerospace Industries Association of America, presented his views of general aviation products in an address to the Air Transport Management Institute last year. Mr. Geuting said:

The industry does not believe the next ten years will see any revolutionary changes in general aircraft design. The changes occurring will be the result of steady evolutionary progress. Moreover, the industry anticipates that piston power, though greatly improved even over today's highly reliable and efficient engine, will continue to dominate the volume general aircraft market during the next ten years.9

General opinion, as expressed by the various aircraft executives, tended to support or substantiate the view that general aviation's immediate future lay with the piston-driven aircraft. High initial cost, high operating expenses, and lack of acceptable performance at low altitudes and on short runways seemed to preclude the jets' immediate acceptance. The main users of the jet-type aircraft were large corporations which were using them for high-speed and long distance executive transportation.

Further improvement in the cost and performance features will mean a wider variety of uses for the jet-type aircraft in general aviation. The major area for jet aircraft use in the general field at present seems to lie entirely in business flying.

**Types.** Cessna Aircraft Company and Piper Aircraft Corporation led all manufacturers in the number of models produced, each producing thirteen separate models. Beech Aircraft Corporation ranked third; Aero Commander, Incorporated, fourth; and Mooney Aircraft Corporation fifth in the number of different models produced. Aero Commander, Incorporated, produced the only jet aircraft of any of the companies studied. Relying entirely on the single-engine market, Mooney Aircraft Corporation had never produced a twin-engine aircraft.

**TABLE I**

NUMBER OF AIRCRAFT TYPES, 1963

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Single engine</th>
<th>Twin engine</th>
<th>Twin jet</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna Aircraft Company</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Piper Aircraft Corporation</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Beech Aircraft Corporation</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Aero Commander, Incorporated</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Mooney Aircraft Corporation</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>16</strong></td>
<td><strong>1</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>
Performance characteristics. The wide range of performance characteristics adds to the complexity of sales training. This in turn makes it more necessary to have a well developed and integrated sales training program within the industry. As shown in Table II, power ratings and speed vary to a considerable degree in the forty models produced. This fact is also true in other characteristics. For example, the twin engine craft have the greater ranges, seat more passengers, and carry the larger useful loads, but even here major differences exist between product lines.

Prices. The most meaningful approach to a discussion of aircraft prices is in terms of a basic package, or a standard aircraft. Like the automobile, the aircraft is subject to varying price quotations, depending on optional accessory equipment. For this reason, the prices shown in the table are prices which reflect standard equipment only. It should be noted that the standard equipment varies from model to model and from manufacturer to manufacturer. However, the standard price offered the best comparison that was available.

The most expensive aircraft produced by the five companies studied was the 1121 Jet Aero Commander which had a standard retail price of $475,000. The highest
TABLE II

SPREAD OF MAJOR CHARACTERISTICS OF THE
FORTY MODELS PRODUCED, 1963

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Single-engine</th>
<th></th>
<th>Twin-engine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Power (Horsepower)</td>
<td>108 hp</td>
<td>260 hp</td>
<td>(2)160 hp</td>
<td>(2)450 hp</td>
</tr>
<tr>
<td>Cruising Speed&lt;sup&gt;a&lt;/sup&gt; (Miles per hr.)</td>
<td>95 mph</td>
<td>195 mph</td>
<td>171 mph</td>
<td>245 mph</td>
</tr>
<tr>
<td>Range&lt;sup&gt;b&lt;/sup&gt; (Miles)</td>
<td>300 mi.</td>
<td>1640 mi.</td>
<td>1025 mi.</td>
<td>1800 mi.</td>
</tr>
<tr>
<td>Useful Load&lt;sup&gt;c&lt;/sup&gt; (Pounds)</td>
<td>555 lbs.</td>
<td>1680 lbs.</td>
<td>1440 lbs.</td>
<td>3790 lbs.</td>
</tr>
<tr>
<td>Seats</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Price&lt;sup&gt;d&lt;/sup&gt; (Dollars)</td>
<td>$5,495</td>
<td>$26,875</td>
<td>$33,900</td>
<td>$132,000</td>
</tr>
</tbody>
</table>

<sup>a</sup>Cruise speed is generally recorded at 75% power at optimum altitude.

<sup>b</sup>Range is maximum or optimum range.

<sup>c</sup>Useful load is gross weight minus empty weight.

<sup>d</sup>Prices as shown are generally with standard equipment only. Prices are F.A.F.
priced piston-driven twin was the Beech Super 18 which had a standard price of $132,000. With a standard price of $33,900, the lowest priced twin engine aircraft produced by these five companies was the Piper Twin Comanche.

Prices varied in the single-engine line from a standard of $5,495 for the Piper Colt two-place aircraft to the Beech Bonanza which carried a standard price of $26,875. The heavier four-place single-engine aircraft were more expensive. The less expensive airplanes were the sport and instructional two-place craft.

Product design and engineering have reached a high level of efficiency in the general aviation industry. The forty models discussed in this chapter are dependable and capable airplanes which were designed to provide safe, rapid, and economical transportation.

III. TOTAL UTILITY AIRCRAFT SALES
(1957-1962)

Table III shows the comparison between total unit sales and total dollar sales for the years 1957 to 1962. As shown in this table, unit sales were greatest in 1959 and have decreased since that year. The largest dollar-sales year recorded in the history of the utility aircraft industry was 1960. The fact that 1962 dollar volume was 137.5 per cent of 1957's while total units produced
TABLE III

ANNUAL SHIPMENTS OF UTILITY AIRCRAFT, 1957 to 1961*

<table>
<thead>
<tr>
<th>Year</th>
<th>Utility aircraft shipments Units</th>
<th>Index</th>
<th>Manufacturers Net Billing Price (Thousands of Dollars) Sales volume</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>6,118</td>
<td>100.0</td>
<td>99,652</td>
<td>100.0</td>
</tr>
<tr>
<td>1958</td>
<td>6,414</td>
<td>104.8</td>
<td>101,939</td>
<td>102.3</td>
</tr>
<tr>
<td>1959</td>
<td>7,689</td>
<td>125.7</td>
<td>129,876</td>
<td>130.3</td>
</tr>
<tr>
<td>1960</td>
<td>7,588</td>
<td>124.0</td>
<td>151,220</td>
<td>151.7</td>
</tr>
<tr>
<td>1961</td>
<td>6,778</td>
<td>110.8</td>
<td>124,323</td>
<td>124.8</td>
</tr>
<tr>
<td>1962</td>
<td>6,697</td>
<td>109.4</td>
<td>136,837</td>
<td>137.5</td>
</tr>
</tbody>
</table>

was only 109.4 per cent of the base year indicated the increased dollar value of each unit sold. Today's planes are larger, are more expensive, and are capable of carrying larger useful loads.

Manufacturers reporting to the Aerospace Industries Association give the number of monthly sales by model, but do not report dollar sales by model. Since dollar sales are reported as a total monthly figure, no attempt has been made to present sales volume of single-engine and twin-engine planes.

The more expensive equipment of Aero Commander, Incorporated, and Beech Aircraft Corporation was reflected in these companies' share of the total dollar market. Both of these companies had higher percentage shares of the dollar market than of the unit market. On the other hand, Cessna Aircraft Company and Piper Aircraft Corporation, the leaders in volume produced, showed smaller percentage shares of the total dollar market.

Beech Aircraft Corporation, Cessna Aircraft Corporation, and Piper Aircraft Corporation have dominated the utility aircraft market for some time. For instance, in Table IV, under the category called other, it might be noted that these other companies totaled less than one per cent of all dollar production in 1962. Several small companies such as Champion, Call Air, Lake, Colonial,
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of unit volume</td>
<td>% of dollar volume</td>
<td>% of unit volume</td>
<td>% of dollar volume</td>
<td>% of unit volume</td>
<td>% of dollar volume</td>
<td>% of unit volume</td>
<td>% of dollar volume</td>
<td>% of unit volume</td>
<td>% of dollar volume</td>
<td>% of unit volume</td>
<td></td>
</tr>
<tr>
<td>Cessna</td>
<td>40.7</td>
<td>31.1</td>
<td>45.6</td>
<td>36.3</td>
<td>46.7</td>
<td>35.2</td>
<td>49.0</td>
<td>37.5</td>
<td>40.5</td>
<td>34.0</td>
<td>46.6</td>
<td>36.7</td>
</tr>
<tr>
<td>Beech</td>
<td>12.9</td>
<td>32.2</td>
<td>10.7</td>
<td>26.3</td>
<td>11.6</td>
<td>27.5</td>
<td>12.7</td>
<td>28.5</td>
<td>12.1</td>
<td>29.8</td>
<td>12.4</td>
<td>27.3</td>
</tr>
<tr>
<td>Piper</td>
<td>37.6</td>
<td>23.4</td>
<td>33.7</td>
<td>26.1</td>
<td>32.9</td>
<td>25.5</td>
<td>30.5</td>
<td>23.2</td>
<td>39.0</td>
<td>23.2</td>
<td>31.9</td>
<td>23.5</td>
</tr>
<tr>
<td>Aero Commander</td>
<td>2.3</td>
<td>9.9</td>
<td>1.5</td>
<td>6.8</td>
<td>1.9</td>
<td>8.2</td>
<td>2.0</td>
<td>7.9</td>
<td>2.1</td>
<td>8.9</td>
<td>1.8</td>
<td>7.9</td>
</tr>
<tr>
<td>Mooney</td>
<td>1.7</td>
<td>1.1</td>
<td>2.5</td>
<td>1.8</td>
<td>2.4</td>
<td>1.6</td>
<td>2.3</td>
<td>1.8</td>
<td>4.2</td>
<td>3.2</td>
<td>5.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Other</td>
<td>4.8</td>
<td>2.3</td>
<td>5.8</td>
<td>2.6</td>
<td>4.5</td>
<td>2.0</td>
<td>3.5</td>
<td>1.1</td>
<td>2.1</td>
<td>0.9</td>
<td>1.4</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Helio and Taylorcraft fell into that category. Primarily, these companies were manufacturers of single-engine aircraft.

Table IV reveals this significant point: In any industry in which the market share shifts radically between major companies the need for some form of non-price competition—sales training, for example—seems to be obvious.

The reader should refer to that part of Chapter II on growth potential and market forecasting before coming to any definite conclusions as to the outlook for total dollar volumes for the future.

IV. SOME CHARACTERISTICS OF THE GENERAL AVIATION MARKET

Growth potential. Dr. L. L. Thomason says, "The lay public must be awakened to the impact of aviation on the economic, political, social, and technical well-being of everyday American living and modern business."\(^{10}\) All of the firms in the general aviation industry seem to be optimistic about the future. Increases in use potential have been accomplished and further gains are expected, especially in dollar volume. The 1962 exports of utility

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\(^{10}\) Thomason, op. cit.
aircraft, valued at $40,000,000, were approximately equal to the total general aircraft sales ten years ago.\textsuperscript{11} "Today's active general aviation fleet is more than 80,000 aircraft, widely dispersed throughout the nation, and is expected to grow to 100,000 during the next five years."\textsuperscript{12}

During the past few years several studies relating to market potential in the small aircraft industry have been made. Among these were the Booz-Allen-Hamilton study of 1954, the Curtis Commission Report of 1955, the Report of the Task Force on National Goals-Project Horizon of 1961, and the Federal Aviation Agency Aviation Forecast for 1962 to 1970.

The Booz-Allen-Hamilton study was considered by many to be the first scientific attempt to ascertain market potential in the small aircraft industry. This project presented information on four main points:

1. The size of the potential market for Cessna-type planes
2. The characteristics of customers
3. The distribution system


\textsuperscript{12}\textit{Ibid.}, p. 2.
4. The soundness of sales tactics

In this study three distinct markets were noted. The company plane market which had travel requirements of at least 100,000 passenger miles per year contained 16,000 multi-engine and 15,000 single-engine prospects. The executive plane market which had travel requirements of 25,000 miles per year contained 20,000 single-engine prospects. The executives in this market were those who had no access to a company aircraft. The personal plane market contained persons with $25,000 yearly income who could have used the aircraft in joint business and personal flying. This individual market contained 80,000 single-engine, non-farming prospects and 20,000 single-engine farming prospects.

A market penetration ratio was established against the 151,000 prospects and a total of 33,000 potential buyers was established. In a summary of the Booz, Allen, and Hamilton\textsuperscript{13} study prepared by the marketing research personnel, Dr. Thomason predicted that his company could be selling 10,000 aircraft by 1960. This prediction proved to be an overstatement; however, Cessna Aircraft

\textsuperscript{13}The information presented in this discussion was developed from "The Booz-Allen-Hamilton Analysis of Market Potential for Utility-Type Aircraft," as summarized by Leslie L. Thomason, Director of Air Age Education, Cessna Aircraft Company, Wichita, Kansas.
Company did lead all manufacturers in 1960, and delivered 3,588 of the 7,689 units produced.

The purpose of the Curtis Report on Aviation was to give the Assistant to the President of the United States on Aviation Facilities Planning, a basis for forecasting needs for the period 1955 to 1975.¹⁴

Certain assumptions were made by the commission prior to predicting the activity in general aviation in the twenty year period. These assumptions were, "(1) no global war to occur but international tension to continue with periodic local incidents; (2) United States continues vulnerable to enemy attack; (3) population increasing to about 210 million to 220 million by 1975; and (4) defense expenditures maintained at a level between thirty billion to forty billion per year in 1955 dollars."¹⁵

The Curtis Report predicted an increase in annual hours flown from 9.0 million in 1955 to a forecast of 25.8 million for 1975. The estimate of 12.7 million hours was slightly above the 12.2 million hours recorded

¹⁴The information presented in this discussion was developed from "The Curtis Commission Report Forecasts" as summarized by Leslie L. Thomason, Director of Air Age Education, Cessna Aircraft Company, Wichita, Kansas.

¹⁵Ibid., pp. 1-2.
in 1960. Table V shows the forecast of the Curtis Commission as that forecast relates to total hours flown in general aviation.

**TABLE V**

**FORECAST OF HOURS FLOWN IN GENERAL AVIATION**

**BY TYPE OF FLYING, 1954-1975**

*(millions of hours)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>3.9</td>
<td>6.9</td>
<td>9.5</td>
<td>13.0</td>
<td>16.0</td>
</tr>
<tr>
<td>Commercial</td>
<td>1.9</td>
<td>2.1</td>
<td>2.7</td>
<td>3.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Instructional</td>
<td>1.3</td>
<td>1.5</td>
<td>1.7</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Pleasure</td>
<td>1.9</td>
<td>2.2</td>
<td>2.4</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>9.0</td>
<td>12.7</td>
<td>16.3</td>
<td>21.0</td>
<td>25.8</td>
</tr>
</tbody>
</table>


A comparison of the Curtis forecast and the actual results of 1960 showed that the business segment of the market did not measure up to the forecast, whereas each of the other segments exceeded the hourly forecast. (See Table VI.)
### TABLE VI

**COMPARISON OF FORECAST HOURS AND ACTUAL HOURS FLOWN IN GENERAL AVIATION, 1960**

<table>
<thead>
<tr>
<th>Type flying</th>
<th>Actual</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>5.3</td>
<td>6.9</td>
</tr>
<tr>
<td>Commercial</td>
<td>2.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Instructional</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Pleasure</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12.2</strong></td>
<td><strong>12.7</strong></td>
</tr>
</tbody>
</table>


The study in Table VII was made prior to 1954. It forecasted the exceptional rise in business flying, commercial flying, and instructional flying and a decrease in personal flying. Present data seem to bear out this forecast. 16

### TABLE VII

**FORECAST OF THE GENERAL AVIATION FLEET, 1955-1975**

(Thousands of aircraft)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>18.6</td>
<td>29.0</td>
<td>38.0</td>
<td>50.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Commercial</td>
<td>8.6</td>
<td>10.0</td>
<td>14.0</td>
<td>17.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Instructional</td>
<td>4.7</td>
<td>5.0</td>
<td>6.0</td>
<td>7.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Pleasure</td>
<td>29.4</td>
<td>23.0</td>
<td>15.0</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61.3</strong></td>
<td><strong>67.0</strong></td>
<td><strong>73.0</strong></td>
<td><strong>90.0</strong></td>
<td><strong>105.0</strong></td>
</tr>
</tbody>
</table>


Project Horizon was a part of a study made for the purpose of defining national aviation goals for the period 1960 through 1970. The report presented the national aviation goals in the form of twenty-four needs. Many of the needs stated by the committee are broad and apply to all parts of the aviation industry; however, since this thesis is concerned with the general aviation industry, only those needs specifically related to general aviation are listed:

(4) Maintain a financially sound, technologically alert, privately owned aviation manufacturing industry.

(6) Accelerate the growth of general aviation, recognizing it is an essential and expanding element of the national air transportation system, enhancing both the business life and leisure time of those who utilize it.

(15) Explore and exploit fully the contributions that the development of economic short-haul vehicles with vertical and/or short takeoff landing characteristics can make to our national transportation system.

(24) Encourage a broader understanding of the challenges and promises of aviation through education and information programs directed at all age and educational levels of the population.17

As to products for the future, the Project Horizon committee indicated that jet, vertical take-off and

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landing, and short take-off and landing vehicles would receive more emphasis. However, the committee expressed the belief that the reciprocating engine would remain in the dominant position in the forecast period. Further, the report indicated, "All aircraft in the general aviation fleet will be better instrumented as the decade progresses so as to lessen the pilot load and to enable perhaps as much as threefold increases in general aviation instrument flying."\(^{18}\)

Table VIII shows the utilization of general aviation planes during the years of 1960 to 1970, according to Project Horizon Report.

The estimates made by the members of the committee of Project Horizon appear to be more conservative than those estimates made by the Curtis Commission. For example, for the year 1965 the Curtis Committee's report showed an estimate of a total of 16.3 million hours flown in general aviation, while the estimate made in Project Horizon was a total of 15.7 million hours. Also, another notable difference of opinion existed in the business and personal flying categories. The Curtis Commission predicted that business flying would reach 9.5 million hours and that personal flying would be 2.4 million hours for

\(^{18}\)Ibid., p. 87.
TABLE VIII
ESTIMATED UTILIZATION OF GENERAL AVIATION AIRCRAFT,
CALENDAR YEARS 1960-70*

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Hours flown (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1960</td>
<td>12.2</td>
</tr>
<tr>
<td>1961</td>
<td>12.9</td>
</tr>
<tr>
<td>1962</td>
<td>13.6</td>
</tr>
<tr>
<td>1963</td>
<td>14.3</td>
</tr>
<tr>
<td>1964</td>
<td>15.0</td>
</tr>
<tr>
<td>1965</td>
<td>15.7</td>
</tr>
<tr>
<td>1966</td>
<td>16.2</td>
</tr>
<tr>
<td>1967</td>
<td>16.7</td>
</tr>
<tr>
<td>1968</td>
<td>17.3</td>
</tr>
<tr>
<td>1969</td>
<td>17.9</td>
</tr>
<tr>
<td>1970</td>
<td>18.5</td>
</tr>
</tbody>
</table>

1965. The committee for Project Horizon predicted that 5.8 million hours would be flown in personal flying.

Although 1965 figures are not available at the time of writing, the report by the committee working with Project Horizon seems to be more in line with actual figures for 1961 and should prove more accurate for 1965.

In October, 1961, the Federal Aviation Agency prepared a forecast of aviation for the fiscal years of 1962 to 1967.\(^\text{19}\) The contents of this report are comparable to the data presented by the committee on Project Horizon since the Federal Aviation Agency provided the data for both studies. Figures did differ slightly, since the Project Horizon study was based on calendar-year figures. Also, different agencies within the Federal Aviation Agency compiled and released the data.

For most purposes, the data presented and the opinions expressed were generally consistent in the Federal Aviation Agency forecasts and the Project Horizon report. The preceding discussion leads to a conclusion that the market potential in general appears to be promising. All segments of the market seem to be

expanding. The growth potential outlined here seems to again indicate the need for sales training activities.

Total hours flown in general aviation is expected to rise from 12.6 million hours in 1961 to approximately 16.0 million hours by 1965 and to about 19.7 million hours by 1970.\footnote{These figures are averages of the figures given in the Curtis Report, Project Horizon, and the Federal Aviation Agency Forecast.}

General-aviation aircraft use should be dominated by business flying in the years to come. The business segment of the market has been about 45 per cent of the total hours flown since 1955. All forecasts project continued growth in the business flying category. The business market contains a large number of potential prospects and the market penetration ratio has not yet come up to standard. Companies are becoming more diversified and decentralized. The result of this diversification and decentralization is increasing travel requirements, hence more business flying.

Before the complete accomplishment of forecasted goals can be attained, aircraft companies must learn to exploit the full potential of the business market through better marketing methods. The growth potential for the entire general aviation market appears to be present;
turning this potential into aircraft sales is the basic problem.

The forecasts show an increase of approximately 3,000 aircraft per year. Production of the utility aircraft would include this 3,000 plus the number of aircraft which are retired from the active fleet (production equals sales plus or minus inventory change). For example, in 1961, 80,630 utility aircraft were reported as active aircraft. The 1961 figure was an increase of 4,080 aircraft over the 1960 figure of 76,550 aircraft. In the above figures, 4,080 aircraft of the 7,588 aircraft sold in 1960 should be referred to as "new" units and the remaining 3,508 units should be called "replacement" units for the airplanes which were retired. If the number of utility aircraft retirements approximates 3,000 to 5,000 per year, and utility aircraft additions to the total fleet approximate the forecasted figure of 3,000, then utility aircraft sales by units would approximate 6,000 to 8,000 per year in the years to come. Statistics are needed concerning the known and projected rates of retirement for the utility aircraft fleet. More demand for fully instrumented and equipped new aircraft with greater seating capacity will tend to cause the rate of retirement to accelerate.
The potential shown here seems to indicate that the marketing functions should be stressed in the general aviation industry. For this reason, continued emphasis on sales training also seems mandatory.

**Marketing research.** Marketing research studies were begun by the major companies when emphasis on marketing was increased. The Booz-Allen-Hamilton study of 1954 for Cessna Aircraft Company was one of the earliest attempts to determine market structure and potential. Piper Aircraft Corporation also used an early survey to determine the characteristics of the Piper aircraft owner. Beech Aircraft Corporation established a market research department within the company's marketing division during this period. The aircraft industry has been slow in adapting and using methods for marketing research. Here again is evidence of the manufacturing or production orientation of this industry.

Beech Aircraft Corporation had a marketing research department which conducted basic research in such areas as total market potential and related saturation and penetration ratios of this market. Henry Ryan, their director of market research, listed the following five factors as those important to the successful measuring
and pinpointing of the potential for the business airplane.\textsuperscript{21}

1. The geographical location of potential prospects
2. The size or financial strength of potential prospects
3. The buying patterns of business airplane users
4. The travel patterns of business travelers
5. The geographic regional degree of airplane acceptance

Each of these factors was considered in relation to the eight Standard Industrial Classifications. All factors were weighted and applied to the number of firms available in each of the 3,074 counties in the United States. The result of the entire weighting process produced what was called a "Base Potential Index."

A regional acceptance factor was then developed for both the single-engine and twin-engine airplane. A combination of the base index and the acceptance factor gave "... the True Potential Indexes ... thus insuring a proper 'shoe fit' for every region in the country."\textsuperscript{22}

"The true potential of an area is the measure of potential prospects who exhibit both the need for business airplanes and the ability to buy business


\textsuperscript{22} Ibid., p. 4.
airplanes.\textsuperscript{23} Ryan's attempt to determine "true potential" was an attempt to measure the effective demand for business aircraft. The firm furnished each distributor with a quarterly Market Penetration Report. With the quarterly report, distributors and dealers could develop two additional marketing tools:

(1) Market Saturation ... which is the measure of the extent to which local, regional or the national market has been penetrated to date.

(2) Penetration Rate ... which is the current rate at which a local, regional or the national market is being penetrated.\textsuperscript{24}

At Cessna Aircraft Company, initial research began with the study conducted by Booz, Allen, and Hamilton. Though discussion of the study is not repeated in this section, important marketing research data were furnished by this report. The company saw the value of the initial studies and contracted with the management consulting firm to continue studies until 1960. "Subsequent studies by Booz-Allen-Hamilton have further explored the needs for strengthening the distribution system, re-organization, and refinement of the original study to indicate

\textsuperscript{23}Ibid., p. 6.

\textsuperscript{24}Ibid., p. 8.
where the potential exists."²⁵

The marketing research department here has also
developed indices which are very similar to those used in
the Beech Aircraft Corporation's research activities
described earlier. Penetration and saturation rates were
established, just as in the other studies. In addition
the company had conducted surveys of aircraft owners and
had used the results of these surveys as a guide for
further production and marketing activities. Some of the
results of one survey, the single-engine study, will be
discussed in the section on consumer characteristics.

In the Piper Aircraft Corporation, the market
analyst was responsible for marketing research and in-
plant public relations activities. He also was respon-
sible for the accumulation of all general market data.

The company established sales quotas and penetra-
tion ratios by geographic areas. These distributor
quotas were computed from a series of weighted factors
which included population, automobile sales, aircraft
registrations, weather, income, and experience of a
geographic area for absorbing aircraft. Exact details
for the establishment of the quota were not available.

At the time of this study, the firm was undergoing a complete examination by the Arthur D. Little consulting firm with considerable emphasis being placed on marketing policies.

The organization chart at Aero Commander, Incorporated, did not show a staff position for marketing research. However, when the company considered the production of the 1121 jet aircraft, the company hired two outside marketing research firms. After consideration of the research information received, the company decided to produce and market the jet aircraft. 26

Mooney Aircraft Corporation did not have a marketing research position within the organization at the time of the study. There was no evidence of formal marketing research activity, either by Mooney or by consulting firms. This company appeared to have first concentrated on manufacturing and the establishment of the distribution organization.

The research conducted by the aircraft companies was market research. The question may be raised as to the need for a more thorough use of all types of marketing research. This would include the use of consumer

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studies, and the investigation of such areas as advertising, sales promotion, and sales training.

**Characteristics of the market and of the consumer.** Since this industry has a complex market and since the characteristics of the customer vary with the type of flying performed, a basic understanding of these factors is essential for sales training. Many of the characteristics of the market have already been discussed in earlier sections of this paper. Further discussion is based on two factors:

1. Product use by type of flying and product use by Standard Industrial Classification
2. Geographic location of the present general aviation fleet

General aviation includes business flying, commercial flying, instructional flying, and personal flying.\(^2^7\)

**Business flying** is the use of an aircraft in the conduct of a business or enterprise. Business flying accounted for about 45 per cent of the total hours flown and 50 per cent of the total hours flown in general aviation in 1962.

\(^{27}\) *Aviation Facts and Figures*, op. cit., p. 133.
Commercial flying is the use of an aircraft in the charter carrying of persons or cargo, and includes all agricultural dusting and spraying for hire. Commercial flying accounted for about 18 per cent of the total hours flown and 17 per cent of the total miles flown in general aviation in 1962.

Instructional flying is the use of an aircraft to train new pilots and to upgrade the skills of existing flyers. Instructional flying accounted for about 15 per cent of the total hours flown and 12 per cent of the total miles flown in general aviation in 1962.

Personal flying is the use of an aircraft for the personal business and pleasure of the owner. Personal flying accounted for about 23 per cent of the total hours flown and 21 per cent of the total miles flown in general aviation in 1962.

One market survey completed by Cessna Aircraft Company analyzed product-use by type of flying. Commercial and instructional flying were considered to be business flying in the results shown in Table IX. As the table shows, joint-use prevailed when the entire fleet of both used and new aircraft was considered.
### TABLE IX*

**AIRCRAFT USES—ENTIRE FLEET**

<table>
<thead>
<tr>
<th>Type of flying</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure only</td>
<td>31</td>
</tr>
<tr>
<td>Business only</td>
<td>19</td>
</tr>
<tr>
<td>Joint business and pleasure</td>
<td>49+</td>
</tr>
</tbody>
</table>

*Table compiled from information in Addendum #2, Cessna Single-Engine Survey, Cessna Aircraft Company, Wichita, Kansas, received from Dr. L. L. Thomason, March 12, 1963.

In the second part of the study, which was an analysis of the new airplane market, the picture changed in relation to the use of aircraft. The results of the second part of the study are shown in Table X.

### TABLE X*

**AIRCRAFT USES—NEW AIRCRAFT**

<table>
<thead>
<tr>
<th>Type of flying</th>
<th>Cessna (new)</th>
<th>Piper (new)</th>
<th>Beech (new)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure only</td>
<td>7.63%</td>
<td>6.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Business only</td>
<td>40.8%</td>
<td>40.15%</td>
<td>43.45%</td>
</tr>
<tr>
<td>Joint business and pleasure</td>
<td>51.5%</td>
<td>53.0%</td>
<td>53.65%</td>
</tr>
</tbody>
</table>

*Table compiled from information in Addendum #2, Cessna Single-Engine Survey, Cessna Aircraft Company, Wichita, Kansas, received from Dr. L. L. Thomason, March 12, 1963.
The use-pattern for Cessna and Piper new aircraft was approximately the same. Both companies produced product lines with similar characteristics and prices. In both companies the new planes were used more for business-only and for joint-use than were the planes in the entire fleet. Pleasure use of the new aircraft dropped far below the level of use for the combined market. The use of the Beechcraft was closely related to the other two patterns with one exception. The exception was seen in the pleasure-only category, where only 2.9 per cent of the new Beechcraft were used only for pleasure flying. The Beechcraft's high purchase price was a deterrent to prospective pleasure flyers.

Significant differences could be observed in pleasure, business, and joint-use patterns when the overall fleet of both new and used aircraft was compared to the new aircraft fleet.

Cessna Aircraft Company also made an analysis of product use by Standard Industrial Classification.28 The comparison here was made between the entire fleet of both new and used aircraft and the new fleet. Table XI shows a comparison by Standard Industrial Classification of the overall fleet versus the new aircraft purchases.

28For the definition of Standard Industrial Classification, see Dun and Bradstreet Reference Book, pp. viii to xi, 1962.
### TABLE XI*

**UTILITY AIRCRAFT USE BY STANDARD INDUSTRIAL CLASSIFICATION**

<table>
<thead>
<tr>
<th>Standard Industrial Classification</th>
<th>Column I Entire fleet use</th>
<th>Column II New aircraft use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Services</td>
<td>Rank</td>
<td>Rank</td>
</tr>
<tr>
<td>Transportation, Communication and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, Forestry and Fisheries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade—Wholesale and Retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other (Combined)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>14.93</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>17.98</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>14.03</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>14.93</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>16.19</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>23.00</td>
</tr>
</tbody>
</table>

*Table compiled from information in Addendum #2, Cessna Single-Engine Survey, Cessna Aircraft Company, Wichita, Kansas, received from Dr. L. L. Thomason, March 12, 1963.*
Table XI showed that the use of new aircraft alone differed significantly from the use of the entire mixed fleet. Aircraft use by industry for the entire fleet is shown in Column I and aircraft use by industry for new planes is shown in Column II. In new aircraft uses, manufacturing firms moved to the number one position and agriculture, forestry and fisheries firms moved to the second position. Transportation, communication and utility firms dropped to fifth and service organizations dropped to a tie for third and fourth positions in new aircraft uses. These rankings support the opinion that the new aircraft market lies predominantly in the manufacturing area. Persons engaged in the service industries tended to fly used aircraft in the conduct of their business, as did those individuals engaged in transportation, communication and utility business endeavors.

In order for competing firms to locate prospects accurately, the market was also broken down by states where aircraft were used. This is shown in Table XII. Some states (New York, for example) showed a lower rank for active utility aircraft than of a total of civilian aircraft when air carriers were included. The "acceptance factors," which were mentioned earlier in the discussion on marketing research, are apparent in Table XII. The California area, for example, had a high degree of
### TABLE XII*

**ACTIVE UTILITY AIRCRAFT, JANUARY, 1961**

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Number of active utility aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>California</td>
<td>9,884</td>
</tr>
<tr>
<td>2.</td>
<td>Texas</td>
<td>6,719</td>
</tr>
<tr>
<td>3.</td>
<td>Illinois</td>
<td>3,885</td>
</tr>
<tr>
<td>4.</td>
<td>Ohio</td>
<td>3,412</td>
</tr>
<tr>
<td>5.</td>
<td>New York</td>
<td>3,015</td>
</tr>
<tr>
<td>6.</td>
<td>Michigan</td>
<td>2,957</td>
</tr>
<tr>
<td>7.</td>
<td>Pennsylvania</td>
<td>2,644</td>
</tr>
<tr>
<td>8.</td>
<td>Florida</td>
<td>2,561</td>
</tr>
<tr>
<td>9.</td>
<td>Indiana</td>
<td>2,130</td>
</tr>
<tr>
<td>10.</td>
<td>Minnesota</td>
<td>2,128</td>
</tr>
</tbody>
</table>

acceptance because of greater travel distances, favorable climatic conditions, high population density, rough terrain, and limited availability and suitability of surface travel facilities.  

Characteristics of the consumer. In 1962, Cessna Aircraft Company sampled 9,300 of 90,000 aircraft owners to determine location of these aircraft owners, composition of the new and used fleets, methods of purchase, type of aircraft financing used, decisive factors affecting consumers' choice, and degree of brand loyalty. One part of the study dealt with all aircraft owners, the other with only those respondents who had purchased new aircraft. Furthermore, the study provided a chance to observe the following two factors:

1. Characteristics of the product which the consumer considered to be most important or decisive in product choice or selection

2. Degree of brand loyalty

From this study, the four principal factors found to affect choice were: cost of operation, performance, safety, and ease of flying.


30Cessna Addendum #2, op. cit., pages unnumbered.
As used in Table XIII, performance refers to a number of operating characteristics, such as rate of climb, glide ratio, operating ceiling, stall speed, and take-off and landing distances. The term also relates to speed, range, and ease of flying. Six of the eight persons interviewed by this writer gave performance as one of the top three decisive factors affecting choice of aircraft. Performance ranked high because two of the respondents were professional pilots and two other respondents were owners of the more expensive single-engine aircraft. Table XIV indicates that different types of owners have different prime interests in the selection of aircraft. For instance, the operators for pleasure-only appeared to be principally interested in ease of operation.

The results of the interviews are similar to the findings of the Cessna Aircraft Company study. Both studies indicated that the reasons given for aircraft purchases were rational reasons, with such factors as style and prestige being relatively unimportant. Manufacturers were aware of these rational motives and fewer and fewer model changes were being made. New models were being introduced as the market and competition dictated.
### DECISIVE FACTORS IN THE CHOICE OF UTILITY AIRPLANES

<table>
<thead>
<tr>
<th>Factors</th>
<th>Number of answers</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of operation</td>
<td>1,793</td>
<td>18.0%</td>
</tr>
<tr>
<td>Performance</td>
<td>1,499</td>
<td>16.0%</td>
</tr>
<tr>
<td>Safety</td>
<td>1,438</td>
<td>15.0%</td>
</tr>
<tr>
<td>Ease of flying</td>
<td>1,042</td>
<td>11.0%</td>
</tr>
<tr>
<td>Size</td>
<td>946</td>
<td>10.0%</td>
</tr>
<tr>
<td>Service</td>
<td>580</td>
<td>6.0%</td>
</tr>
<tr>
<td>Speed</td>
<td>579</td>
<td>6.0%</td>
</tr>
<tr>
<td>Comfort</td>
<td>518</td>
<td>5.0%</td>
</tr>
<tr>
<td>Style</td>
<td>314</td>
<td>3.0%</td>
</tr>
<tr>
<td>Range</td>
<td>223</td>
<td>2.0%</td>
</tr>
<tr>
<td>Others</td>
<td>739</td>
<td>8.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,621</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*Table compiled from information in Addendum #2, Cessna Single-Engine Survey, Cessna Aircraft Company, Wichita, Kansas, received from Dr. L. L. Thomason, March 12, 1963.*
<table>
<thead>
<tr>
<th>Type of owner</th>
<th>Type of aircraft</th>
<th>Decisive reasons given for aircraft purchase (in the order of importance)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pleasure-only</td>
<td>Cesna</td>
<td>ease of flying</td>
</tr>
<tr>
<td></td>
<td>Beech</td>
<td>ease of flying</td>
</tr>
<tr>
<td>Business-only</td>
<td>Aero Commander*</td>
<td>performance</td>
</tr>
<tr>
<td></td>
<td>Piper*</td>
<td>economy of operation</td>
</tr>
<tr>
<td></td>
<td>Cessna</td>
<td>economy of operation</td>
</tr>
<tr>
<td>Joint-use</td>
<td>Cessna</td>
<td>safety</td>
</tr>
<tr>
<td></td>
<td>Piper</td>
<td>comfort</td>
</tr>
<tr>
<td></td>
<td>Beech</td>
<td>performance</td>
</tr>
</tbody>
</table>

*Professional pilots.
Brand loyalty. In line with the Cessna Aircraft Company study, Table XV shows the various degrees of brand loyalty.

<p>| Type of aircraft to be purchased next time |
|------------------|----------------|---------|---------|--------|
| Type owner |</p>
<table>
<thead>
<tr>
<th>Cessna</th>
<th>Piper</th>
<th>Beech</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna owners</td>
<td>80%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Piper owners</td>
<td>43%</td>
<td>42%</td>
<td>5%</td>
</tr>
<tr>
<td>Beech owners</td>
<td>15%</td>
<td>4%</td>
<td>76%</td>
</tr>
</tbody>
</table>

*Table compiled from information in Addendum #2, Cessna Single-Engine Survey, Cessna Aircraft Company, Wichita, Kansas, received from Dr. L. L. Thomason, March 12, 1963.

According to the Cessna Aircraft Company study, Cessna owners had the strongest degree of brand loyalty. Eighty per cent of the Cessna owners stated that they would again purchase another Cessna. Beech owners showed the second strongest degree of brand loyalty with 76 per cent of the owners saying that they would again purchase a Beech airplane. Forty-two per cent of the Piper owners stated that they would again purchase a Piper aircraft. Actually, Piper owners showed a one per cent higher preference for Cessna airplanes than for Piper craft. The fact that a large number of people learned to fly in
a Cessna plane might be the reason for such a high degree of brand loyalty for the Cessna product. The report showed that "Of all the owners who learned to fly in a Cessna, 61% presently own a Cessna, 12% own a Piper, and 7% own a Beech. Of those who learned in a Piper, 21.8% own a Cessna, 34.1% own a Piper, and 6.5% own a Beech."31

In an effort to further verify the Cessna Aircraft Company's report a limited number of interviews were conducted. No meaningful conclusions concerning brand loyalty can be drawn from this small investigation since the actual availability of aircraft, the service and maintenance, and the storage factors play an important part in aircraft selection and the manufacturers did not have equal representation in the distribution channels in this geographic area. However, the answers shown in Table XVI were obtained from the questionnaire.

As shown in Table XVI, both Beech owners stated that they would again buy a Beech airplane, and one Cessna owner stated that he would buy a Beech plane. Two of the three Cessna owners stated that they would buy another Cessna. One Piper owner stated that he was undecided between a Piper twin and an Aero Commander. The

31 Ibid., p. 8.
<table>
<thead>
<tr>
<th>Type owner</th>
<th>Cessna</th>
<th>Piper</th>
<th>Beech</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna owners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Beech owners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Piper owners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>x (Aero Cmdr.)</td>
<td></td>
</tr>
<tr>
<td>Aero Commander</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>x (Aero Cmdr.)</td>
<td></td>
</tr>
</tbody>
</table>
one Aero Commander owner stated that he would prefer to purchase another Aero Commander.

Some additional information was sought in the questionnaire prepared by this writer. In summary, the respondents had a high regard for the safety of the small aircraft, pointing to human error in judging weather as the major cause of small aircraft accidents. Most all respondents agreed that airline travel was good, but that airline travel did not compare favorably with general aviation on short hauls to sparsely populated areas. Many expressed the opinion that general aviation travel was also better to some of the larger metropolitan areas since the small aircraft pilot could choose the time of departure and choose the airport for landing. Some respondents pointed out that general aviation could operate in and out of approximately 6,000 airports while the airlines were restricted to about 600 airports.

All respondents seemed to feel that the future of general aviation was very promising. They expressed the opinion that most of the larger companies would be thinking in terms of pure-jet aircraft for future operations. Also, some respondents expressed views on the future development of vertical take-off and landing vehicles. Many respondents stated that they had considered the importance of the salesman and his relationships and
responsibilities to the customers. These observations take on added importance when one is discussing the nature of sales training.

V. ORGANIZATION OF THE MARKETING DEPARTMENTS

The marketing department of each firm has shown substantial growth in the last few years in both number of staff and in number and importance of responsibilities. A good example of the increased importance of marketing can be seen in a comparison of the commercial sales division of Beech Aircraft Corporation in 1956 with the domestic sales division of the company in 1962. In 1956, the Commercial Sales Division was the marketing division of Beech Aircraft Corporation, outside of a section handling export sales and a vice president handling military sales. Figure 3 can be compared with the Domestic Sales department of 1962, shown in Figure 4. However, a complete idea of the more recent marketing organization at Beech Aircraft Corporation is shown in Figure 5.

The organization chart of the more recent marketing division indicated the importance of the overall marketing task, not just the sales job. The major positions were:
FIGURE 3

BEECH AIRCRAFT CORPORATION
COMMERCIAL SALES DIVISION
1956
FIGURE 4
BEECH AIRCRAFT CORPORATION
DOMESTIC SALES DIVISION ORGANIZATION CHART
1962
FIGURE 5

BEECH AIRCRAFT CORPORATION
MARKETING DIVISION ORGANIZATION CHART
1960
Vice President—Marketing
Vice President—Domestic Sales
Vice President—Export Sales
Manager—Public Relations
Manager—Parts and Service Operations
Manager—Product Development
Manager—Market Research
Manager—Sales Training

The organization charts seem to indicate that management had recognized the need for a marketing orientation. Men in top management positions expressed this view concerning the importance of the marketing functions. Another basic reason for presenting the organization charts is to show the position of the sales training director or manager. For example, the sales training manager at Beech Aircraft Corporation held a position of equal importance to the manager of public relations, the manager of parts and services, the manager of product development, and the manager of market research.

The director of marketing training at Cessna Aircraft Company held a position at the same level in the organization as others of great responsibility such as the international sales manager, the domestic sales manager, and the director of sales promotion and advertising. At Mooney Aircraft Corporation, the director of public relations was also in charge of sales training. The position was equal in importance to the regional sales manager's. At Piper Aircraft Corporation the
director of sales training had equal rank to the domestic sales manager and the export sales manager. Aero Commander, Incorporated had a position on the organization chart for a director of sales training which carried responsibility equal to that of the product manager's and to that of the manager of sales and finance. However, Aero Commander did not have anyone filling the position of director of sales training.

VI. CHANNEL OF DISTRIBUTION

The channel of distribution for light aircraft is relatively direct, in that few middlemen are found between the manufacturer and the consumer and industrial user. The characteristics of the product and the general nature of the market have led to the establishment of a distribution-dealer system of distribution.

In an article concerning the classification of marketing goods, Aspinwall also showed that channel selection is based upon the relationship between five factors: (1) gross margin, (2) adjustment, (3) search time, (4) consumption time, and (5) replacement rate.

---

If, for example, a product has a high gross margin, high amount of adjustment, high amount of search time, high consumption time, and low replacement rate, the product will likely be distributed more direct and have fewer middlemen than those products with a lower degree of these factors. Also, certain market characteristics, habits of the customer, and competitive conditions exist which would also be factors in determining the channel of distribution. The market for aircraft is fairly concentrated and the numbers of potential users is small when compared to a product such as a "convenience good" which lies at the other end of the marketing spectrum and uses an indirect channel.

Most industrial buyers devote their main attention to some sort of value analysis which allows them to carefully consider all of the factors involved in making a purchase. Industrial purchases are made less frequently, have a larger unit sale, require some sort of technical assistance, and require consultation among a number of persons before the final decision to purchase.

Wagel points out the two major reasons for the use of middlemen in the marketing of airplanes in his thesis study:33

33Wagel, op. cit., p. 137.
1. Less capital is required in distribution through middlemen. The investment in selling expenses, to include salesmen and sales offices, and in servicing is too great for the manufacturer.

2. The marketing task can be turned over to the middlemen so that the manufacturer can concentrate on physical production. (Manufacturers were beginning to realize that this reason is not so important.)

In the utility aviation industry, manufacturers selected the distributor and then these chosen distributors established a dealership organization within the prescribed geographic boundaries of the distributor's territory. The selection of the dealers and the exact geographic placement of the dealers was entirely up to the discretion of the distributor. However, the distributor could make the decision of dealer selection and placement based upon projections of market potential furnished by the manufacturer. The distributor was the main link in the trade channel for light aircraft.

The distributor selected dealers so that some of the financial burden of the trade channel could be passed on to the dealership, so that a closer personal contact could be established with a broader market, and so that
the distributor territory could be covered adequately.\textsuperscript{34}

Since business, commercial, and instructional uses constituted about 76 per cent of the general aviation market, and only 24 per cent was personal use,\textsuperscript{35} most of the purchasers of light aircraft were industrial customers. The market for light aircraft should be referred to as a market which includes both retail and wholesale distribution by the dealer, since the general definition of wholesaling includes selling for both resale and industrial use. However, in the utility aircraft industry the distributor was considered to be the wholesaler and the dealer was considered to be the retailer, since the dealer was the one who sold to the final purchaser. The market was actually composed of both consumers (personal users) and industrial users, but persons within the trade referred to all purchases by final aircraft owners as retail purchases.

According to Wagel,\textsuperscript{36} approximately 95 per cent of the aircraft were marketed through the distributor. The distributor then sold direct to the purchaser or to a

\textsuperscript{34}\textit{Ibid.}, p. 138.

\textsuperscript{35}\textit{Aero Space Facts and Figures 1962}, \textit{op. cit.}, p. 133.

\textsuperscript{36}Wagel, \textit{op. cit.}, see Chapter 6.
Only about 1.6 per cent of the aircraft followed a direct channel from the manufacturer to the purchaser. Direct sales were usually fleet-sales, or sales of aircraft to be used for experimental purposes. Approximately 3 to 4 per cent of the aircraft were distributed from the manufacturer to the dealer. The manufacturer went to the dealer if no distributor was available.

Figure 6 gives an idea of the nature of the main channel of distribution for light or utility aircraft.

*Note: The distributor sometimes sells direct to the consumers and industrial users in the immediate geographic area.

FIGURE 6

MAJOR CHANNEL OF DISTRIBUTION FOR UTILITY AIRCRAFT

More aggressive selling is achieved through the direct channel of distribution. However, since the actual salesman is not a member of the parent manufacturing company, many problems of control, supervision, and training tend to develop.
At the time of the study, the five companies covered in this paper had distributors and dealers as shown in Table XVII.

The wide line of the Cessna Aircraft Company and the Piper Aircraft Corporation required the extensive middleman-coverage shown in Table XVII. Mooney Aircraft Corporation, on the other hand, was just beginning to organize a more complete trade channel. Aero Commander, Incorporated did not feel the need for extensive coverage since the twin-engine line of products does not require the broad coverage of the cheaper single-engine line. Beech Aircraft Corporation's channel structure was comparable in number to Cessna Aircraft Company and Piper Aircraft Corporation at the distributor level, but was not as extensive at the dealer level.

In the future, there may be shorter and more direct channels of distribution. Manufacturers, as a rule, were selling only to distributors. The more direct channels will gain in importance if the financial position of both the manufacturer and the distributor improves and the market continues to show a tendency toward the purchasing of the more expensive equipment. Some manufacturers will also choose to increase the number of factory owned representatives, decrease the number of
TABLE XVII
UTILITY AIRCRAFT DISTRIBUTORS AND DEALERS, 1963

<table>
<thead>
<tr>
<th>Company</th>
<th>Distributors</th>
<th>Dealers</th>
<th>Factory owned distributorship</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Foreign</td>
<td>Domestic</td>
<td>Foreign</td>
</tr>
<tr>
<td>Cessna</td>
<td>35</td>
<td>49</td>
<td>400</td>
<td>57</td>
</tr>
<tr>
<td>Piper</td>
<td>43</td>
<td>14</td>
<td>309</td>
<td>120</td>
</tr>
<tr>
<td>Beech</td>
<td>35</td>
<td>31</td>
<td>111</td>
<td>32</td>
</tr>
<tr>
<td>Mooney</td>
<td>46</td>
<td>0</td>
<td>94</td>
<td>18</td>
</tr>
<tr>
<td>Aero Commander</td>
<td>23</td>
<td>8</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>182</strong></td>
<td><strong>102</strong></td>
<td><strong>928</strong></td>
<td><strong>227</strong></td>
</tr>
</tbody>
</table>

69
middlemen, and expand or combine sales territories. 37

VII. MARGINS FOR DISTRIBUTORS AND DEALERS

"The middleman's margin is stated in terms of a discount from list price." 38 On most single-engine aircraft the margin was approximately 25 per cent for the distributor and 20 per cent for the dealer. On the more expensive twin-engine equipment the margin was approximately 20 per cent for the distributor and approximately 15 per cent for the dealer.

For example, on a single-engine aircraft with a list price of $20,000, the distributor paid the manufacturer $15,000 and sold to the dealer for $16,000. The dealer in turn sold to the customer for $20,000. This example reflected a margin of 25 per cent for the manufacturer-to-distributor transaction and a discount of 20 per cent from list price for the dealer. When the distributor sold direct to the purchaser the markup would be 25 per cent. A situation of this nature could lead to


38 Wagel, op. cit., p. 134.
some competition between distributor and dealer but manufacturers usually discouraged this competition.

Generally, dealers purchased through distributors and most distributors did not engage in direct competition with the dealer. Further, dealer sales to final customers became service and maintenance responsibilities of the dealer and the distributor was relieved of any of the service and maintenance financial burden.

Some distributors and dealers negotiated between themselves as to the dealer margins. However, in most cases the manufacturer made suggestions as to the amount of the dealer discount.

Some manufacturers encouraged distributors and dealers to carry greater inventory by offering larger discounts to those middlemen who handled more expensive demonstrators. If a middleman could not afford to carry the larger and more expensive models in stock, the product was available for demonstration from the manufacturer for a rental fee.

Larger discounts were also given when sales quotas were met and exceeded. Discounts differed slightly from producer to producer but each company usually provided higher discounts to the middleman who performed additional marketing functions.
VIII. MANUFACTURERS' MARKETING AIDS TO MIDDLEMEN

Manufacturers' marketing aids to middlemen fall into three categories: (1) Sales Training, (2) Advertising, and (3) Sales Promotion. Sales training is discussed in detail in other chapters of this paper. Most of the national advertising in the general aviation industry was presented in trade magazines. Such publications as Flying, Aviation Week, Business and Commercial Aviation, and many others in the trade category, carried the majority of the national advertising effort. Shifts in emphasis toward more non-technical advertising would mean that magazines such as Time, U. S. News and World Report, and Business Week would show more general-aviation ads than in the past. Feature articles were also being released to important business and financial periodicals such as the Wall Street Journal and Barrons.

Radio and television advertising, which is primarily geared to the mass consumer market, provides little opportunity for the aircraft advertiser.

Newspaper advertising by the manufacturer was quite limited. Most of the newspaper advertising was done by the distributor and the dealer on a regional or local level.
Brochures, direct mail leaflets, pictures, and other sales promotional items were available from the manufacturer. However, in most cases, the middleman shared in or assumed completely the cost of the aids. For example, Cessna Aircraft Company furnished an initial supply of basic aids prior to the introduction of new models. Additional supplies were ordered from the manufacturer. The cost of all the forms was borne by the middleman.

The aircraft manufacturers also participated in air shows, product displays, and airport dedications. If the special occasion was an attempt by the middleman to increase sales, then the expense was borne by the middleman. Events of national significance, or of direct benefit to the manufacturer, were normally financed by the manufacturer.\(^39\)

The cost of other advertising, such as telephone-directory advertising, was shared between the middleman and the manufacturer. All inquiries received by the manufacturer as a result of national advertising were answered and copies of the correspondence were forwarded to the appropriate distributor and dealer. In 1962,

\(^39\)Cessna Policy Information and Procedures, Cessna Aircraft Company, Wichita, Kansas, p. 82.
Piper Aircraft Corporation received 30,000 inquiries as a result of national advertising.40

The discussion in this chapter has shown the relationship of the marketing aspects of small aircraft to sales training. A discussion and analysis of the nature of sales training and the actual conduct of the training within the industry is presented in the next chapter.

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CHAPTER III

SALES TRAINING WITHIN GENERAL AVIATION

I. GENERAL NEED AND IMPORTANCE OF A SALES TRAINING PROGRAM

Sales training is not new; however, it appears that many industries have not fully utilized this marketing method. According to Maynard and Davis, the National Cash Register Company of Dayton, Ohio, conducted the first organized training for salesmen in 1886.¹

The later developments in sales training have come from a recognition of its importance. Maynard and Davis emphasize the point that "the modern emphasis on sales training is a recognition of the fact that certain gains accrue from the establishment and application of a properly conceived and well-administered program of instruction.... A poorly prepared program may result in little but a waste of money. It may even produce negative results."² Converse, Huegy and Mitchell state: "It has been said that sales training is inevitable. It

²Ibid., p. 278.
occurs whether it is planned and supervised by management or not. Copying techniques used by others, trial and error, and experience may eventually lead to the right solution, but if this is the only training, the process is usually very costly to the man and his company.  

Most business decisions concerning the use of resources can be compared with expenditures on sales training. The alternatives are not always clear, and very few business activities lend themselves to absolute measurement. Moreover, since most firms operate in conditions of imperfect competition, they are acutely aware of their actions in respect to competition. Long-run considerations become most important.

After World War II, many concerns found that they were entering a buyer's market with a seller's market sales force. Salesmen were left to their own ideas and methods of sales training. They trained themselves in what they considered to be the most important features of selling the product in question. Today, the shift in emphasis is toward formalized training. For competitive reasons, sales training has become more important. These recent developments have forced both the company and the

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salesman to be more professional and to be more business oriented in their training activities.

II. ESTABLISHMENT OF A SALES TRAINING PROGRAM

The establishment of a sales training program requires detailed planning on a variety of subjects. The major aspects of a sales training program are:

1. Planning 6. Location
2. Objectives 7. Instructors
3. Contents 8. Administration
4. Types 9. Evaluation
5. Methods and Techniques

Planning, objectives, contents, and evaluation are discussed briefly here. More detailed information concerning all sales training subjects can be found in the marketing literature.\(^4\)

A thorough study of a firm's marketing policies and goals should be accomplished before any decision is made regarding the development of a sales training program. The five-paragraph Estimate of the Situation\(^5\) used

\(^4\)Reference should be made to the Bibliography of this paper.

by the military may provide a useful format in planning for sales training. In planning for sales training, the individual manager will find it necessary to look first at the specific objectives and problems of his own firm.

Since the over-all objective of business activity is profit, sales training must also be directed toward the profit goal. Sales management writers seem to agree on five major objectives of sales training:

1. **Increased sales volume.** With any business expenditure the hope is that the total cost will be more than offset by the gain in total revenue.

2. **Lower selling costs.** The outlay for sales training may also be instrumental in reducing the variable expenses of selling.

3. **Lower turnover of salesmen.** Lower turnover in the sales force can reduce the cost of selling. The experienced salesman also usually contributes more to the increased volume than does the inadequately trained man.

4. **Better sales supervision and control.** Ease of supervision leads to unification of selling effort, higher morale for the salesmen, elimination of misfits, fewer mistakes, and a more professional approach to selling.
5. Better customer relations. The key to better customer relations lies in the salesman's faith, honesty, sincerity, knowledge, attitude, and diplomacy. Many of these traits can be learned in a formal sales training program.

The content of a sales training program should be based directly on the firm's training objectives. A consensus of the sales management and sales training literature shows that most formal sales training programs include information on four basic subjects: (1) product, (2) company, (3) market, and (4) selling techniques.

The most basic approach to an evaluation of sales training comes from the attempt to determine if sales training objectives (discussed earlier) are being accomplished. A trainer must use a considerable amount of ingenuity in setting up measuring devices for determining the effectiveness of a sales training program.

Another approach to an evaluation of a sales training program is a measurement of the selling effectiveness of those who have undergone training. Even though evaluation of training on a before-and-after basis is not always feasible, emphasis can be placed on such factors as volume, selling expenses, territorial coverage, and customer complaints. Actual records can be observed and persons in supervisory positions can be asked to
evaluate the performance of specific members of the sales force. Forms which show sales effectiveness and achievement are extremely helpful in measuring the results of sales training.\(^6\)

Advanced training is sometimes easier to evaluate than basic training, since some salesmen do not get to attend the advanced courses and their performance can be compared to the performance of those who did attend.

The trainer can use tests and examinations to measure the student reception of the material presented in the program. These tests can also serve as a measure of the effectiveness of the content of the program and of the instructor's presentations. Last, the trainer can get the opinions of the salesmen and of the customer. Salesmen's opinions about the content and conduct of the program should be submitted as anonymous reports. Strong points and weaknesses of the salesman can also be measured by getting customer opinions.\(^7\)

Although dollar evaluation is difficult, every attempt should be made to determine the effectiveness of a sales training program. All results of the attempts to

evaluate sales training programs can be used as a basis for the improvement of the present program and for the development of future programs.

III. NEED AND IMPORTANCE WITHIN GENERAL AVIATION

As mentioned earlier, the most important factors to be considered in the establishment of a sales training program are:

1. Past training and experience of the salesman
2. Nature of the product
3. Nature of the market
4. Buyer knowledge
5. Attitude of management

Probably no large industry in the United States today can claim a unique situation in each of the factors shown above, except the general aviation industry. A brief look at some of the unique characteristics of the general aviation industry, its products, its market, and its salesmen will point up some of the reasons why sales training is imperative in the industry.

Large amount of product knowledge required. The aircraft salesman must be familiar with the intricacies
of his product. For example, in the Cessna or Piper line of products, the salesman would need to know the detailed features of thirteen different models. A salesman's knowledge would have to carry much deeper, however, since each model can be equipped with different accessories, can sell for different prices, and can have different capabilities and performance features. The aircraft salesman must be able to convert all product features into meaningful customer benefits. These customer benefits will change from prospect to prospect. For example, a professional pilot would be more interested in product features which were related to the technical aspects of flight and aircraft performance. The inexperienced private pilot would be interested in features which make the airplane safer and easier to fly. The businessman would be interested in the cost and revenue aspects of the product.

**Varied uses for the product.** The light aircraft is a basic instrument of transportation. In the field of transportation, the aircraft has some disadvantages; however, the plane has a variety of uses which could be considered as offsetting advantages. In this light, an airplane is a substitute for an automobile, a bus, a train, a ship or for another mode of air travel. Flying,
to some, is a hobby while to others it is a method of dusting crops. To some, flying is a way to go fishing; to others, flying is a necessity of business enterprise.

The varying uses for the product, the ease of substitution, make market determination and customer prospecting extremely difficult. Adequate sales training in market information and in selling techniques seems mandatory to insure that the proper customer can be made aware of the varied uses for the product.

**Sophistication and intellect of customer.** The airplane purchaser, like all buyers in the industrial market, is a well-informed customer. Some segments of the light aircraft market are well informed about the capabilities of the product, and other segments of the market are well informed as to the uses for the product.

The purchaser of an aircraft to be used for pleasure is either a former owner or a person who has developed a keen interest in aviation. If the customer is a former owner, he will be informed, and if he is an enthusiast, he will pursue adequate product knowledge.

The business owner may also be well informed about the technical aspects of the product; without question, the business owner will be aware of the travel requirements for the firm. Some "value analysis" is normally
made by the purchaser of the business aircraft since rational buying motives predominate in the industrial market. But, as the *Journal of Marketing* points out, the influence of rational motives in the industrial field declines with an increase in product similarity or the ability to substitute one product for another.\(^7\)

**Mathematics of business.** The aircraft salesman will be required to present the product to business executives, so the sales training program must provide the salesman with the opportunity for learning basic profit and loss mathematics and depreciation accounting. Complete knowledge of financial arrangements and leasing possibilities is also essential. Many of the aircraft distributors and dealers were attempting to hire salesmen who, by experience, were well versed in the mathematics of business.

**Customer relations.** The market for light aircraft can be broken into user and non-user categories. Although the greatest potential lies within the non-user category, the immediate market lies with those persons who have accepted general aviation as a way of life. The user

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market forms a base for the non-user group. Word of mouth advertising from the aircraft user fosters repeat business from that group and has a definite influence on the non-user segment of the potential market.

Distributor and dealer salesman can be made aware of the importance of customer relations during the training program. A customer is not dependent upon a firm; the firm is dependent upon the customer. General aviation, contrary to some opinion, is also dependent upon the customer. The customer is not an outsider to a business firm; the customer is part of the firm; otherwise, no firm would exist. Sales training is needed in the general aviation industry, if for no other reason, to teach customer relations. "Mr. Pilot," "Mr. Fixed-Base Operator," or "Mr. Aviation," is not king; the consumer is the sovereign king.

Fear aspects of flying. The aircraft salesman has one other problem which is unique; the fear of flying is an obstacle most difficult to overcome. Many times the fear of flying is the underlying motive or reason for a lost sale. As yet, aircraft accidents are still sensational news items and the public is quick to criticize the industry. Actually, the safety record in light
aviation is excellent, but the public has been slow to accept this mode of travel.

Properly trained salesmen often can overcome the customer's fear of flying by a logical, sincere, and common sense approach to aircraft operation and flying safety. Flying is an exacting, but fairly simple, procedure. The general public is not aware of the ease of flying or of the safety of the light aircraft and it appears that some people within the industry are reluctant to forfeit their prestige position and discuss this problem before the general public.

**Salesman must be an accomplished pilot.** The major aircraft manufacturers agree that the aircraft salesman must also be a pilot, since he must be able to demonstrate the aircraft. Product demonstration has been an important phase of the selling process. In aircraft selling, demonstration is considered to be practically a necessity.

A portion of the sales training program should be devoted to product demonstration. The best pilot would not necessarily be the best demonstrator; so each salesman must be given instruction in demonstrating the product. Different types of customers will require different types of demonstrations. A salesman has to be aware of
the type of demonstration that is needed; then he must be able to demonstrate adequately.

**Change from production to a marketing philosophy.** The light aircraft industry is undergoing a change toward organization around the marketing concept. Although the industry was at first production accentuated, the growing interest these firms have shown in sales promotion and general marketing problems indicates a probable shift in their point of view. To facilitate this change, it might be more effective if the salesman were to develop a more professional selling background.

Since these five manufacturers represent almost the entire industry and have been operational for a considerable period, it might be assumed that their products are fairly well adapted to the market. The problem now is not principally that of physical differentiation of product as it might have been in the past, but is more likely to be that of establishing their products as unique in the mind of the consumer. Some writers would say that product differentiation is in the mind anyway.

"Production differentiation can only be assumed to have

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8 This change in organization is presented in Chapter II of this paper.
been achieved when the consumer believes the product is different. No amount of physical alteration of a product really changes it unless the buyer actually is convinced that it is a new product. This change can be psychological as well as physical; the same rule applies.9

Unless substantial product cost advantages are possible, the major activity open for product differentiation is the general increase in marketing activity. This would involve such factors as the supervision of more efficient channels of distribution and the hiring and training of better salesmen in order to gain a competitive advantage.

IV. DEVELOPMENT OF SALES TRAINING
WITHIN GENERAL AVIATION

Although the first airplane sale was recorded in 1909, the first formal sales training program did not begin until 1957. Companies had first budgeted marketing-money for advertising and for the establishment of the channels of distribution. The firms who first solved manufacturing and fundamental distributing problems were also the first to use sales training as a marketing tool.

The larger organizations, particularly Beech Aircraft Corporation and Cessna Aircraft Company, were the first to develop sales training programs. Beech Aircraft Corporation conducted some sale motivation schools as far back as 1952, and, in 1956, their organization chart showed a staff position for sales promotion and training. Cessna Aircraft Company developed a sales-training handbook and added an advisory staff position for sales training in 1956. The first formal sales seminars were conducted at Cessna Aircraft Company in December of 1957. The first formal programs were begun at Beech Aircraft Corporation in 1960. Prior to that time, occasional three-day sales motivational seminars were presented. Formal sales training began at Aero Commander, Incorporated in late 1957. However, the original program was terminated in 1961 and no additional formal training had been conducted at the time of this study. Mooney Aircraft Corporation conducted two field schools in 1959. However, the present school was not begun until 1961. Piper Aircraft Corporation was early to recognize the need for sales training but the first formal program was not conducted by the company until April, 1962. The firm had a staff position for sales training, the Director of Sales Education.
Within the entire industry, management was reluctant to hire non-aviation personnel. This reluctance initially caused a shortage of "marketing-oriented" executives in the general aviation business. This philosophy also hindered the early development of sales training.

Since the manufacturers have never been the direct supervisors of the persons who actually make the aircraft sales, they have been slow to recognize the importance of the salesman's tasks, and, hence, slow to assist him through sales training. The recognition of sales training as an important marketing tool has been slow; however, at the time of this study four of the five companies were conducting formal sales training activities. The companies recognized the need for sales training and planned to continue formal sales training programs. The fifth firm appeared to be interested in renewing formal sales training activities.

In the general aviation industry, sales training was constantly being altered and, in most cases, expanded. The changes were a result of marketing management's recognition of the need for revising, upgrading, and expanding existing programs.

Objectives of sales training. The sales training executives in the five firms were asked to furnish the
firm's objectives or goals of sales training. Some twenty-three specific objectives were given during the interviews. Table XVIII classifies the specific objectives under one of the major objectives of sales training presented earlier in this chapter.

Some of the specific objectives, such as "organizing time," were difficult to classify and appear in the table under more than one of the major objectives. Many others could be classified in this same fashion. The main significance of the specific objectives given by the firms is that the objectives reflect the firms' profit attitude, the firms' recognition of the marketing task, and the firms' desire to increase the marketing proficiency of the organizations through the training and development of a professional selling force.

Types of programs and program content. Program content is best discussed by analyzing each of the different types of programs separately. Aero Commander, Incorporated had no sales training program; Mooney Aircraft Corporation and Piper Aircraft Corporation had a basic course; and Beech Aircraft Corporation and Cessna Aircraft Company had a basic course, an advanced course, and a sales management course.
TABLE XVIII

OBJECTIVES OF SALES TRAINING

<table>
<thead>
<tr>
<th>Major objectives of sales training</th>
<th>Some objectives given by the firms in this study</th>
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</thead>
<tbody>
<tr>
<td>Increased sales volume</td>
<td>Increase product knowledge ---- 4</td>
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<td></td>
<td>Improve selling techniques ---- 3</td>
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<td></td>
<td>Improve demonstration methods - 2</td>
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<td></td>
<td>Increase profit -------------- 2</td>
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<tr>
<td>Lower selling costs</td>
<td>To provide business education - 2</td>
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<td></td>
<td>To teach salesmen to organize time ------------------------------- 1</td>
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<td></td>
<td>To assist in sales planning --- 3</td>
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<tr>
<td>Lower turnover</td>
<td>To get lower turnover -------- 2</td>
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<td></td>
<td>To produce a better class of salesmen ------------------------------- 2</td>
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<tr>
<td></td>
<td>To instill higher morale ------ 1</td>
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<tr>
<td>Better sales supervision and control</td>
<td>To develop a professional man - 1</td>
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<td></td>
<td>To approach sales training in an educational manner ------ 1</td>
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<td></td>
<td>To gain control over the selling job ------------------------------- 2</td>
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<td></td>
<td>To assist in sales planning --- 3</td>
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<tr>
<td>Better customer relations</td>
<td>To develop a professional man - 1</td>
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<td></td>
<td>To improve the company image -- 2</td>
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<td></td>
<td>To develop a better class of salesmen ------------------------------- 2</td>
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</tbody>
</table>

The numbers in the right-hand column represent the number of companies who gave the same, or a very similar, objective. The responses shown were made in answer to an open-end question (see Questionnaire Appendix).
Table XIX shows each program and the approximate time allotted to product subjects, market subjects, company subjects, sales techniques subjects, and administrative matters.

**Basic sales training.** The length of the basic training programs varied from 25 hours for the three-day Mooney Aircraft Corporation school to 49-1/2 hours for the eight-day program at Beech Aircraft Corporation. Cessna Aircraft Company and Piper Aircraft Corporation conducted a five-day basic school which ran for 34-1/2 hours. Basic schools, then, varied from 25 hours to 49-1/2 hours.

The amount of time spent on product subjects varied from 20 per cent of one program's content to 51 per cent of another program's subject matter. The range for market subjects varied from 0 per cent to 10 per cent of the school's content. The company subjects ranged from 4 per cent to 12 per cent of the program's content. The amount of training time spent on selling techniques ranged from 27 per cent to 58 per cent. The amount of time spent in administration ranged from 3 per cent to 8 per cent of the training program.

**Advanced sales training.** The advanced schools of both Cessna Aircraft Company and Beech Aircraft Corporation
<table>
<thead>
<tr>
<th>Firm</th>
<th>Product Hrs.</th>
<th>Product %</th>
<th>Market Hrs.</th>
<th>Market %</th>
<th>Company Hrs.</th>
<th>Company %</th>
<th>Sales Techniques Hrs.</th>
<th>Sales Techniques %</th>
<th>Adm. Hrs.</th>
<th>Adm. %</th>
<th>Business Mgt. Hrs.</th>
<th>Business Mgt. %</th>
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<td>10</td>
<td>6</td>
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*The eight-day Course in Basic Sales Techniques at Beech Aircraft Corporation.
stressed training in selling techniques. Approximately 85 per cent of the training time was devoted to subjects on selling techniques. The programs of each company show that the same amount of time was spent on each subject, with one exception. The Beech Aircraft Corporation program was one-half hour longer and that one-half hour was spent on company information. The Cessna program stressed the importance of communication and listening in the selling process. Beech Aircraft Corporation utilized more time on the specific techniques of creative selling.

**Sales management training.** Again, Beech Aircraft Corporation and Cessna Aircraft Company were the only two companies to provide formal training for the sales manager of the distributing organizations.

The majority of the instruction in the Sales Management course at Beech Aircraft Corporation and in the Wholesale Marketing School at Cessna Aircraft Company was on business management and sales management subjects (90 per cent). Product and market subjects were not given, and little time was spent on company information, selling techniques, and administration.

In 1963, Beech Aircraft Corporation introduced the Aerospace Division Marketing Seminar, a three-day school for the salesman in the military division of the sales
force. Beech Aircraft Corporation was the only firm within the industry to offer such a program.

The number of hours of instruction in each program varied, but the percentage comparison is still meaningful because one could observe how each firm was trying to solve different problems. For example, Piper Aircraft Corporation was attempting to combine basic and advanced subjects into one course. In so doing, the company offered less product information and more material on the advanced selling techniques. Even though the base for comparison varied, the content of one program showed a close relationship to the content of another program in the same category. A closer look at the individual objectives and program content for each firm gives a better insight into the thinking of management within the various organizations.

**Location and administration.** The majority of formal sales training, approximately 80 per cent, was conducted on a centralized basis. Cessna Aircraft Company conducted most of the remaining 20 per cent of decentralized training. Piper Aircraft Corporation Aviation planned to take its school to the field in September, 1963. Beech Aircraft Corporation also planned to decentralize as soon as practicable. Beech Aircraft Corporation
and Cessna Aircraft Company had outstanding training facilities in the Wichita, Kansas plants. Piper Aircraft Corporation had no special sales training facilities; however, adequate conference space was available. Mooney Aircraft Corporation also relied on company conference-room space; and a leased training room in the downtown Kerrville area was frequently used. Hotel facilities were used by Aero Commander, Incorporated. The decentralized training was accomplished in conference rooms at the various hotels around the nation. The problem of attendance may cause more training to be conducted on a decentralized basis.

Beech Aircraft Corporation and Cessna Aircraft Company were the only firms in which the person in charge of sales training spent all of his time on that work. Each of these two companies also had an assistant who handled the administrative details of the schools. Piper Aircraft Corporation's Director of Sales Education spent approximately two-thirds of his time on sales training and the remainder on public relations. The person who planned and administered the program at Mooney Aircraft Corporation spent only about one-fourth of his time on sales training.

The amount of money budgeted for formal sales training varied from about $2,000 per year for one firm
to approximately $75,000 per year for another. The amount of money spent on sales training varied from one-thirtieth of one per cent to one-fifth of one per cent of the manufacturers' net billed price. The amount budgeted for formal training in 1962 was greater than in 1961 for all companies.

Cessna Aircraft Company, Mooney Aircraft Corporation, and Piper Aircraft Corporation provided sales training on a "free" basis, but the distributing organizations bore the entire cost of transportation, lodging, and meals. Beech Aircraft Corporation paid all expenses including a salary supplement. During all of the formal sales training programs, salesmen and sales managers were encouraged to maintain contact with home offices and with prospects and customers in the market.

**Evaluation.** Every firm within the industry realized that one of the major weaknesses in a sales training program was the inability to measure or evaluate the results of the training. However, few business expenditures, even for plant and equipment, are capable of absolute measurement.

All four firms which had formal programs used the questionnaire method of evaluation. The questionnaire was completed by the trainee at the end of the course.
The aircraft firms also attempted evaluation through the use of examinations; however, the results of the tests were difficult to correlate with sales results.

Beech Aircraft Corporation supplemented the questionnaire method with a performance review of each trainee on a before-and-after basis. Also, Beech Aircraft Corporation had attempted a subjective evaluation of each trainee. The subjective evaluation was limited since the salesman performed his work away from the parent company. For this reason, some companies preferred to move the program to the field and combine formal training with on-the-job work.

Problems. One problem seems to stand out as a major problem of sales training in the general aviation industry—that of poor attendance. Poor attendance appeared to be a result of two factors: the cost of sending salesmen to training, and the distribution organizations' lack of acceptance of beneficial marketing aids. One company was attempting to combat the first factor by paying expenses. Other organizations might consider this approach since the budget for sales training was still small compared to sales promotion and advertising budgets.
Sales training executives at Beech Aircraft Corporation, Cessna Aircraft Company, Mooney Aircraft Corporation, and Piper Aircraft Corporation reported that sales training received top management's blessing. If so, then budgetary increases can be procured if sales training executives can better show the benefits of the program. Distributing organizations must also be shown the benefits of sales training if the attendance problem is to be solved. In one program in which about twelve persons were slated to participate, only four arrived, and one of those had to leave early.

The programs seem to suffer in some cases because some product instructors could not teach the salesman how to convert product information to customer benefits. In other programs, time was too short to thoroughly cover such subjects as financing, depreciation, and the completed "value analysis." Also, perhaps some sales training executives have not fully recognized the problem of evaluation. Evaluation provides the evidence that management must have before budgets can be increased. Evaluation shows the benefits to the distributor and dealer, and evaluation lays the framework for planning future programs.

Planned future programs. All four firms which had formal sales training programs were planning to continue
sales training activities. The programs were undergoing constant change and expansion. The plans of the firms within general aviation showed tendencies toward the following changes:

1. Increased assistance will be given to the distributor organizations in sales training activities and materials. Visual aids will be used to a greater extent in the continuous programs. Programmed learning will be introduced into the continuous schools.

2. Some expansion will be made in the basic courses. The size of product lines makes this expansion necessary. Also, more time can be made available for training in selling techniques.

3. Training will be decentralized. More training will be moved to the field in an effort to curb the attendance problem.

4. Other companies will begin thinking in terms of a course in sales management.

5. Sales training will expand into the area of military sales.

6. Additional staff members will be added to the sales training sections or departments

The sales training executives interviewed in this study seemed enthusiastic about the future of sales.
training with the general aviation industry.

Recognition of the need for sales training in the industry has been slow. The first formal programs appeared in 1957. Since that time, these five companies had engaged in some type of formal sales training activity.

At the time of this study, the formal sales training schools included four basic schools, two advanced schools, two sales management schools, and one school for salesmen in the military market. Program contents were very similar. Although specific objectives differed from company to company, the goals related directly to the major goals of increased sales volume, lower selling costs, lower turnover of salesmen, better sales supervision and control, and better customer relations.

The majority of formal training was conducted on a centralized basis but the tendency was to decentralize. The three larger firms planned to present field training in late 1963.

The amounts spent on sales training showed a large variance. In every case, more money was spent in the most recent time periods. Expenditures for sales training were expected to increase further.

The industry as a whole had difficulty in evaluating sales training. Additions to staff and movements
to the field should make evaluation easier.

The most basic problem confronting the industry's sales training executives was poor attendance. The problem of "selling" the program to the distributing organizations was admitted to be serious. Perhaps companies should re-evaluate their policy of requiring the trainee's distributing firm to pay the cost of training. Salesmen appear to be reluctant to come to the programs, and when they do come, they are reluctant to use the methods suggested. This appears to be human nature as it relates to attempts to teach or educate.

Sales training executives within the industry were convinced that formal sales training schools are valuable marketing instruments. The plans for each firm included provisions for the expansion of all sales training activities.
CHAPTER IV

SUMMARY AND CONCLUSIONS

The purpose of this study was to analyze the manner in which the five leading utility aircraft companies conducted their sales training activities, the reasons for their methods of sales training, and the problems encountered in their sales training programs. A study in this area is important for three reasons:

1. It reveals the change in general aviation as evidenced by the shift from a physical production orientation to a marketing orientation.

2. It demonstrates the changing attitude toward professionalism in selling generally.

3. It indicates the probable growth potential in the general aviation industry.

The general aviation industry has been a production-oriented business. The trend toward marketing orientation and organization has increased; however, progress along this line has been slow in some organizations. There have been major technological improvements in the type of aircraft manufactured. Methods of marketing the product, although significantly advanced in recent years,
have lagged behind manufacturing technology.¹

The early development of methods of sales training had been adversely affected by the production orientation. When companies first recognized the need for sales training, they lacked qualified personnel to accomplish the task. Some early programs were prepared and presented without adequate consideration of company goals since marketing goals were not clear even to top management in the earlier years.

There has been a change in the attitude toward marketing and the importance of the sales function. Because of this, sales training has progressed, and probably will continue to do so. Businessmen and students of business are living in a time when distribution is recognized as equal in importance to manufacturing. Just the manufacturing of a sound product will not necessarily make possible the exploitation of the potential within the general aviation industry. A company which properly emphasizes sales training and analyzes its marketing problems in the present competitive economy is

¹For information concerning the general nature of marketing within the industry prior to 1957, see John S. Wagle, Jr., "An Analysis of the Marketing of Utility Airplanes, with Emphasis on Marketing Practices and Problems of Manufacturers" (unpublished Doctoral dissertation, Ohio State University, 1957).
more likely to achieve its potential in the industry.

Competitive advantages can be achieved through the more efficient performance of the marketing functions, and sales training is a part of marketing.

The general aviation industry has made an effort to develop sales training programs. However, the task has not yet been completed and continuing revision and change can be expected. From the observations of this writer, the following predictions can be made:

1. There will be changes in the organizational structure of marketing divisions and departments. Companies not having full-time personnel for sales training will tend to add these staff positions. Firms which already have full-time personnel in sales training will continue to supplement the present staff.

2. More emphasis will be given to continuous, or on-the-job, training programs. The manufacturers will provide more training material for the distributor; and the manufacturers will also provide some supervisory personnel to assist with the continuous training.

3. Formal programs will be more decentralized. The plans of each company will call for a more extensive coverage in all subjects. Field
programs will be less expensive for the distributing organizations, and will combat, somewhat, the attendance problem. Some manufacturers may attempt to require mandatory attendance.

4. The extensive use of visual aids and programed techniques will be visible in the on-the-job training. Visual aids will also be used to a greater degree in the formal schools.

5. Distributing organizations are beginning to see the necessity of the professional selling approach. This factor alone should boost sales training activities.

6. If channels of distribution get shorter, through the establishment of company-owned distributors and the elimination of some of the smaller dealers, training will be aimed more at the distributor organizations and less at the dealer firms.

These developments indicate that sales training personnel within the general aviation industry tend to recognize many of the problems to be solved if sales training is to reach its full potential.

Some major conclusions have been reached concerning the sales training activities within the general aviation industry.
Gain acceptance through benefits. Attendance at sales schools is an acute problem. The sales training personnel should follow the advice given to the salesman during training—"sell benefits." Attendance has been, and will continue to be, a problem so long as the salesmen and the distributing organizations do not see the benefits of sales training.

Salesmen, and other trainees who are eligible to attend the programs, must be shown that the school belongs to the trainee, and that the benefits belong, first, to the trainee.

During the planning stage of a sales training program, trainees can be asked for advice on program content. Helpful information can also be received during the evaluation stages. All programs should allow for trainee participation. The use of practical examples, case histories, and panel discussions not only serve to stimulate interest, but also give the student a chance to enter into the program and derive maximum benefit from this participation.

The enthusiasm of the trainer is often projected to the trainees. Sales training personnel must have a sincere belief in the program and the program's worth to the salesman. In many cases tests and examinations can induce the salesman to cooperate with the program.
directors. Appropriate testing will make the salesman realize many of his faults, and will encourage him to correct these faults through proper training.²

Development of professional salesmen. Almost all business concerns today realize that a salesman's job requires the professional approach. Salesmen will give cooperation and support to any program which will further a professional goal. Diplomas and certificates are normally awarded for the completion of sales schools. However, the customers have not been made aware of the salesman's educational qualifications. Sales training should be publicized and tied-in with sales promotion activities.

The selling profession can be upgraded in the utility aircraft industry. A title could be established for the experienced and well-trained aircraft salesman. Certain training requirements, sales results, and examinations might serve as criteria for the selection of the persons to be honored with the title. Additional compensation, in the form of a bonus from the manufacturer, could be made available to those salesmen who fulfill the

necessary obligations and requirements. The movement to
upgrade the salesman's position can also be used to give
the manufacturer closer contact with the selling force.
The closer contact would allow the manufacturer to follow
up on sales training and to receive current suggestions
and criticisms.

Adherence to the fundamentals. Each company had
developed some form of value analysis. Although the
value analysis—an attempt to justify economically an
aircraft purchase—was discussed in the schools, some
salesmen still did not appear to fully understand the
usefulness of this approach. Companies with advanced
schools spent more time on value analysis, but the cover-
age was general in some cases. Since value analysis is
the essence of selling, the basic fundamentals of the
entire approach should be given in a simple fashion that
can be easily understood. Salesmen should be given the
opportunity to apply value analysis during the formal
training. Business mathematics, depreciation, taxes, and
other related subjects must be carefully explained. The
salesman should not have to say, "See your accountant,"
but, instead, should be able to tell the businessman
every aspect of write-off expense on his product, and to
give information on any other matter which relates to the
Some companies' training programs need to present the selling process in more fundamental terms. For example, more time is needed for presenting the selling process so that the salesman can be taken step by step through the selling sequence and can then practice the sequence during the training. Cases showing successful sales should be analyzed and compared to situations in which sales were not made. If possible, each phase of the selling process should be compared to an actual situation.

During the discussion of the prospecting step in selling, additional market data could be introduced and analyzed. Practical methods of prospecting should be developed from the actual market information presented in the formal school.

Applications of the laws of learning. Three basic factors are said to be present in the learning process: frequency, recency, and intensity. Formal sales training programs should be developed with these three learning factors in mind so that the more important subjects can be emphasized. The principles of learning point up the necessity for training beyond the initial stages of

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3Ibid., pp. 66-68.
employment. All course content must be developed in light of the learning principles, and fundamental subject matter must be repeated in the advanced courses and constantly reviewed in continuous training. In this manner, sales training can become an uninterrupted and continuing contribution to the marketing program.

Greater expenditures on sales training. Sales training has been given a position of low priority in the typical company budget. The total expenditure for sales training within the industry was about one-tenth of one per cent of the manufacturer’s net billing price in 1961. This amount seems to be unduly low in relation to other marketing expenditures.

Budget increases are needed so that sales training can be expanded. Some companies will need to add advanced and sales management courses; and all companies will need to spend more money on field training. Firms will be required to provide more training material for the distributing organizations to use in home-station training. Additional trainers are needed so that more frequent contact can be maintained with the selling force.

Sales training will enjoy greater acceptance if manufacturers will provide more financial support. Many distributors and dealers, particularly the small fixed-base
operators, feel that aircraft selling requires too much time and money. The small operation tends to emphasize charter, maintenance, and instructional business. Manufacturers who can assist these men in selling and sales training, and who can keep in direct contact with them in the field, will have greater selling success and will net a higher degree of distributor and dealer acceptance for sales training.

Training sales managers. Closely related to gaining over-all acceptance for sales training is the training of sales managers. Many of the problems of sales training could be solved (1) if only competent and qualified men were hired, (2) if the men hired were properly supervised, and (3) if these men were properly motivated and compensated. In the sales management courses and in contact with the field manufacturers must seek to train the supervising personnel in the functions of sales management. To a large degree, the success of any sales training program depends upon the attitude of supervising personnel toward the manufacturers' sales training objectives. When the supervising personnel feel that the manufacturers is sincerely trying to solve some of the distributing organization's problems, they will attempt to support the program in every possible way. Everyone
in the entire trade channel, from manufacturer to final customer, gains from sales training.

**An efficient approach to training.** All training activities should be conducted in an efficient manner. If the school is to produce a professional man, then the training must be conducted in a professional manner. A time and subject schedule must be prepared and the school should be conducted in accordance with this schedule. Trainees should be required to be prompt and trainers should not take liberties with the salesman's free time. The purpose of the formal school is to train, and all of the scheduled time should be devoted to this end. A minimum amount of time should be spent in registration, roll call, and social activities. In short programs training in the evening hours to supplement the normal training period is acceptable. In some cases trainees might prefer to attend evening sessions. In the longer programs trainees might like the opportunity of having free time during normal training hours so that business and recreational activities could be performed during daylight hours.

The time that the trainer has with the salesman is comparable to the time that a salesman spends with a customer. This time, called by Aspley the "solid gold
hours, "must not be wasted. Adequate planning and preparation can save time and insure adherence to the training schedule.

**Evaluation is imperative.** The answer to most of the problems in sales training in the general aviation industry lies in the area of evaluation, from which these results may be obtained:

1. Course content may be changed to strengthen the program after observation and evaluation of present curriculum.

2. Evaluation points up the areas in which follow-up and continuous training are needed.

3. Trainers and instructors may be graded.

4. Evaluation assists in showing benefits to salesmen, distributors, and dealers.

5. Evaluation strengthens justification, hence supports sales training budget expansion.

More attempts at evaluation are needed in this industry. The job of evaluation is a time-consuming process and few of the companies have adequate personnel to accomplish the full task. Unfortunately, evaluation must precede justification, so every effort must be made to (1) check the sales effectiveness of the trainee through actual sales records, (2) check the reception of
the student and the effectiveness of the instructor through tests, and (3) check the opinions of customers on sales training.

Sales training is still relatively new to this industry. However, the outlook is promising since the personnel who direct sales training and most of top management in the general aviation industry recognize the potential of this marketing tool.

Stringent price competition is not likely to develop in an oligopolistic industry such as light aviation; so most of the competition will be along non-price lines. Sales training, as a method of non-price competition, offers the aircraft manufacturer an excellent opportunity to gain many advantages over competitors. The skillful use of sales training might well be the answer to a long and prosperous future in the coming air and space age.
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APPENDIX A

QUESTIONNAIRE

1. Name of firm:

2. Internal Organization of the Sales Department (attach an Organization chart)

3. Do you have an organized sales training program?
   Yes   No

4. If no to number 3, continue to ask remaining questions about past program or a proposed program in the future. Past - Yes or No  Proposed - Yes  No

5. When did you begin your program?

6. How did the program evolve? (How, when, what was first begun, what was added next, what was added last, general development of the program)

7. What % of sales is budgeted for the sales training program?

8. Is this a gain or loss from last year's budget? How much?

9. What would subtract or omit from the program if this budget were cut in half?

10. What would you add if the budget were doubled?

11. How much does it cost your firm to train a salesmen? (total cost of Sales Training Program divided by number of participating persons)

12. Who is in charge of the sales training program?

13. What is his position within the firm?

14. What % of his time is taken up by this specific work?

15. Who are his assistants?

16. What % of their time is taken up by this specific work?
17. If sales training is not the specific job of the person in charge, explain.

18. Experience of the person and/or persons in sales training: (attach as separate page)
   a. Formal education: (where and when)
   b. Degrees: (what, where, and when)
   c. Major subjects studied: (what)
   d. All business experience, to include aircraft industry and this specific firm. (what, where, when)
   e. Business schooling after formal education: (what, when, where)
   f. General feeling of persons toward the importance of sales training programs.

19. Who handles the administrative details of the program?

20. Would you have a program if competition did not? Why?

21. Do you think that the president of the company is as interested in sales training as you are? Yes  No

22. Why do you believe this is true? (your answer to number 21)

23. Does the sales training program receive the highest managerial blessing? Yes  No  Why?

24. In the past have improvement or expansion suggestions come from you or from higher management?

25. What general type of program do you have? Explain (attach outlines of all of the programs within this firm)
   a. Initial or indoctrination training.
   b. Refresher courses.
   c. Continuous training programs.
   d. Executive development programs.
   e. Other

26. Who is used to train the salesmen in your program?
   a. Supervisors  c. Outside trainers
   b. Other salesmen  d. Other
27. What is covered in each type program? (attach separate sheet containing outline of the program) For example: product knowledge, company knowledge, selling techniques, other)

28. What % of your training is group and what % individual oriented? G _______ I _______

29. Please enumerate the techniques of presentation in your program (% in use of each technique)
   a. Lecture
   b. Discussion
      (1) cases (2) round tables (3) panels
   c. Demonstrations
   d. Role playing
   e. Observers
   f. On the job training
   g. Other

30. Where is the training conducted? % Centralized_____ % Decentralized______

31. What do you consider to be the main objectives of your program? (open-end: Examples are lower turnover, higher morale, control of men, improved customer relations, lower selling costs, more profit, etc.)

32. What are the main problem areas in your program?

33. Does your company subscribe to the Dartnell Service or some comparable sales executive service? Yes No

34. If yes to 33, is this information used as a guide in the program? Yes No

35. Is there a sales training manual which outlines your program? Yes No

36. What was used as a guide in the establishment of your program?

37. Have there been any attempts to evaluate this program? Yes No

38. If yes to 37, how do you evaluate the results of the program?
39. If you were asked to improve your program, what would you do?

40. Do you plan to make any immediate changes to your program at this time? Yes No

41. If yes to 40, what?

42. What plans do you have for sales training for the next 5 years?

43. Do you believe that your firm will continue a program indefinitely?
APPENDIX B

Characteristics of Aircraft Owners

Questionnaire

1. Name of Owner:

2. Type of Owner:
   - Private
   - Joint-private
   - Private company
   - Corporation

3. Type & Year
   - Beech
   - Cessna
   - Piper
   - Mooney
   - Aero Cmdr
   - Other

4. Is this your first airplane?

5. What others have you owned?

6. How long have you owned this airplane?

7. Did you buy it new or used?

8. Approximate Price:
   - New w/o radio
   - New with radio
   - Used w/o radio
   - Used with radio
   - Value now

9. Features liked best in this type and in previous types owned:
   1. Performance
   2. Speed
   3. Comfort
   4. East of flying
   5. Safety
   6. Economy of operation
   7. Appearance (exterior and interior) (style)
   8. Size
   9. Service
   10. Range

10. Features which need improvement:
11. Would you buy this type and kind again? Why?

12. Why did you buy this airplane? Reasons or motivations for purchase.

13. How is the airplane used? Business, personal, commercial (agri) (air taxi), or instruction.

14. How many hours do you use the airplane per year?

15. At this level of operation, what do you consider the operation cost per hour to be? (include FC and VC)

16. What is your opinion of the safety of the light aircraft?

17. What is your opinion of airline travel as compared to travel by light plane?

18. What is your general opinion of the future of general aviation?
APPENDIX C

PERSONAL BACKGROUNDS OF PERSONNEL WHO WERE DIRECTING
SALES TRAINING ACTIVITIES IN COMPANIES STUDIED
Summer 1963

Beech Aircraft Corporation

The Manager of Sales Training for Beech Aircraft Corporation was Eldon Bloyd, forty-four years of age, and a commercial pilot with single-engine, multi-engine, and instrument ratings. He held a Bachelor's degree in Economics with minor fields in English and Psychology. Mr. Bloyd's experience included two years as manager of a Federal Land Insurance Company, and two years as manager of a building and loan association. In 1951, Mr. Bloyd was employed by Cessna Aircraft Company where he remained until 1959. During his eight years with this organization, he served as a regional sales manager, worked in several sales schools, and served as a liaison man on the Booz-Allen-Hamilton Survey. In 1959 he held a dealership with the Cessna organization. Mr. Bloyd joined the staff of Beech Aircraft Corporation as Manager of Sales Training in 1960 where he developed and wrote most of the material for the corporation's sales training courses.
The Assistant Sales Training Manager for Beech Aircraft Corporation at the time of the study was Bob Mallonee, forty years of age, and a commercial pilot with single-engine and multi-engine ratings. He received a Bachelor of Arts degree from the University of Kansas with a major field in Economics. He was employed as a sales engineer with the Coleman Company for two years and was self employed as an independent oil operator for one year. Mr. Mallonee joined the Marketing Division of Beech Aircraft Corporation in 1959.

**Cessna Aircraft Company**

Robert McCormick was Director of Sales Training for this company. Dr. McCormick was not flight qualified although he expressed the desire to take flying lessons. He held a Bachelor's degree in Education, a Master's degree in Theater and Speech, and a Doctor's degree in Speech and Drama. Dr. McCormick was employed by Atherbury Enterprises as a stage manager and actor and by Drury College, St. Louis University, Oklahoma State University, Northwestern Oklahoma State and Lock Haven College as professor of speech and drama prior to joining Cessna Aircraft Corporation in 1957. He was assistant to the Director of Air Age Education from 1957 to 1962 when he became director of sales training.
Mr. Calvin Cooley was chief assistant to Dr. McCormick. Mr. Cooley held a commercial pilot's license with single-engine and multi-engine ratings. He obtained a Bachelor of Science in Business with a major in Finance and Accounting from the University of Kansas and a Master of Business Administration degree with a major in Management from the University of Houston. His business experience included three years as the Assistant to the President and Executive Pilot for C and W Construction Company, two years as Director of the Kansas agricultural surplus property, four years in sales management and sales training at Westinghouse Electric, and four years as a sales consultant and Director of Sales Training with Southwest Marketing Services. He joined Cessna Aircraft Company as the Sales Training Specialist in 1963.

Mooney Aircraft Corporation

Prior to 1962, sales training at this company had been under the direction of the regional sales manager with supervision by company sales management. In 1962, Gene Carmen was employed as Director of Public Relations and Sales Training. Mr. Carmen was forty-six years of age and, though familiar with flying as a navigator in World War II, was not a qualified pilot. He attended a junior college in Flint, Michigan and the University of
Miami. His business experience included twenty-two years in the Chevrolet Division at General Motors in material control and parts and accessories where he rose to manager of the latter division. He was manager of sales and advertising at Standard Electric Company for five years and in private business for three years before joining Mooney Aircraft Company in the spring of 1962.

**Piper Aircraft Corporation**

Mr. P. A. Topping was responsible for sales training at Piper Aircraft Corporation. He was forty-nine years of age and a commercial pilot with single-engine and multi-engine ratings. He attended the Wharton School of Business for two years and took correspondence work in business from the Alexander Hamilton Institute, New York University, Columbia and the University of Michigan. He had been with the company for thirteen years—seven years as a district sales manager, one and one-half years as a field training coach, one year as the research director for executive sales and three and one-half years as director of sales education (his position at the time of the study). Prior to joining Piper Aircraft Corporation, Mr. Topping worked in a New York advertising firm and was sales manager for a midwest aviation sales and service organization.
This abstract is approved by

[Signature]

Major Professor

[Signature]
A STUDY OF SALES TRAINING
WITHIN THE GENERAL AVIATION INDUSTRY

Abstract of dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

CLYDE ELI HARRIS, JR., M.B.A.
University of Arkansas, 1960

1964
The University of Arkansas
A STUDY OF SALES TRAINING
WITHIN THE GENERAL AVIATION INDUSTRY

The study analyzed the manner in which the five leading utility aircraft companies conducted their sales training activities, the reasons for their methods of sales training, and the problems encountered in their sales training program.

Sales training, as defined in this paper, refers to an organized attempt by the management of a business organization—in this instance a utility aircraft manufacturer—to advise, assist, prepare, discipline, teach, and educate the organization's selling personnel at all levels so that better results—greater sales with less effort at lower costs—can be attained.

Sales training in the general aviation industry appears to be important for three reasons: (1) the shift from a physical production orientation to a marketing orientation, (2) the changing attitude toward professionalism in selling, and (3) the growth potential which lies within the industry. It appears that the early development of sales training was adversely affected by the production orientation and when initial programs were prepared marketing goals were not clear. The changing attitude toward the sales function appears to have
permeated this industry causing increased considerations of sales training. This training, a method of non-price competition, also provides a base for the exploitation of the growth potential which lies within the industry. The general development of all marketing within the industry is discussed so that the significance of sales training can be observed.

Actual attendance in sales training programs was used to gather specific information from the five leading manufacturing firms who produced about 98 per cent of the unit and dollar volume within this industry. No attempt was made to investigate the supplementary training performed by the distributors and dealers in the channel of distribution.

Six predictions concerning sales training within this industry can be made:

1. Staff positions for sales training will be increased.
2. Continuous training will receive greater emphasis.
3. Programs will become more decentralized.
4. Visual aids and programmed techniques will be used more extensively.
5. Distributing organizations will become more selling oriented.
6. Future training will be directed more toward distributors than dealers.

The eight conclusions of the paper are summarized in the following statements: (1) salesmen accept training only when they fully understand the benefits; (2) firms will tend to upgrade the selling profession; (3) companies should attempt to adhere more closely to the basic fundamentals of the selling process; (4) sales training, like all education, should be based upon the laws of learning; (5) greater expenditures on sales training seem mandatory; (6) additional training is needed at the sales management level; (7) formal training schools will find it necessary to adhere to a strict time and subject schedule; and (8) evaluation of sales training is imperative.