



PROGRESS REPORT
Project No. B-170

IDENTIFICATION AND EVALUATION
OF
PROBLEMS AND NEEDS
OF
SMALL MANUFACTURING MANAGEMENT

Prepared for
Small Business Administration
Washington, D. C.

January, 1960



Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia

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SUMMARY

Name of grantee

Georgia Institute of Technology, Atlanta, Georgia

Title of project

"Identification and Evaluation of Problems and Needs of Small Manufacturing Management"

Period covered by progress report

July 1, 1959, through December 31, 1959

Percentage of project completed

In terms of time expended by professional personnel, the project was approximately 40 per cent completed on December 31, 1959. Progress to date has been in accordance with original time schedules.

Project activities to date

On December 31, 1959, all work specified under Phase 1 of the project had been completed or was in process and nearing completion. A preliminary questionnaire was designed and validated, and a final questionnaire form and covering letter were developed. Considerable time was spent in developing a mailing list of small manufacturers to be contacted in the questionnaire survey. Questionnaires were mailed to 4,564 small manufacturers in the State. Of these 152 were returned undelivered, while completed questionnaires were received from 995 respondents before the end of the period covered by this report. A total of 690 of the respondents qualified as "small manufacturers." Questionnaires received from qualified firms were classified for tabulation and analysis purposes, and master tabulation cards were prepared. Some preliminary tabulations were made and are included as a part of this report, but more detailed analyses and interpretations of results were not attempted since questionnaire returns were not complete and follow-up activities had not begun.

Work plans for next six months

On or before January 31, 1960, questionnaire responses will be followed up and survey results will be tabulated and analyzed in detail. This will complete Phase 1 of the project. Phase 2 will begin in February and will be completed by May 15, 1960. In this phase, approximately twenty representative small manufacturers will be analyzed in depth to discover underlying

causes of management problems that are not revealed in survey results. Between May 15 and the completion of the project on June 30, the problems, needs and reactions identified in Phases 1 and 2 will be analyzed and evaluated, and recommendations will be developed for broadening and strengthening management assistance programs and services for small business.

Scheduled date for forwarding rough draft of completed research

A rough draft of the completed research will be forwarded to the Small Business Administration on or before June 30, 1960.

Questionnaire form

Copies of the covering letter and questionnaire form used in the mail survey of small manufacturers are included as Exhibit 1 and 2 in the Appendix to this report.

Professional personnel conducting study

Project activities during the period covered by this report were conducted by the following professional personnel of the Industrial Development Branch, Engineering Experiment Station, Georgia Institute of Technology: Dr. Ernst W. Swanson, Senior Research Economist and Head of Industrial Economics Research; Dr. Kenneth C. Wagner, Head of the Industrial Development Branch; Jerry L. Lewis, Research Scientist and Head of the Organization and Manpower Section; Charles H. Sewell, Assistant Research Scientist; and Charles L. Dickson, Research Assistant.

Background of newly-acquired professional personnel

Bibliographies and biographies of Charles H. Sewell and Charles L. Dickson are included in the "Personnel" section of this report.

Benefit of project conclusions and findings

The conclusions and findings of this project will benefit small business firms by specifying additional or supplementary services which could be provided by the Small Business Administration, directly or through other agencies or institutions, to make production and management assistance programs more practical and useful.

INTRODUCTION

On June 19, 1959, the Georgia Institute of Technology was awarded a grant under Section 7 (d) of the Small Business Act, as amended, (Public Law 85-536, Public Law 85-699) to carry out the research project entitled "Identification and Evaluation of Problems and Needs of Small Manufacturing Management." Sponsored by the Small Business Administration, this project was designated as Engineering Experiment Station Project No. B-170 and was assigned to the Industrial Development Branch, Engineering Experiment Station, Georgia Institute of Technology.

Work on Project B-170 was started in July, 1959, and will be completed on or before June 30, 1960. A final published report of the findings of this research project will be submitted to the Small Business Administration on or before July 31, 1960.

This interim report describes the progress made in accomplishing the objectives of the research project. The progress reported in the following pages covers the period from July 1 through December 31, 1959. As of December 31, the project was approximately 40 per cent completed (in terms of time expended by professional personnel). Progress to date has been in accordance with original time schedules.

OUTLINE OF PROJECT

Work on the SBA research project designed to identify and evaluate the problems and needs of small manufacturing management in Georgia has followed the procedure and methodology specified in the approved project proposal. A brief outline of the project follows:

A. Definition of project goals:

1. The goals of this project are to provide objective and meaningful answers to the following questions:
 - a. What types of operational and managerial problems are most critical to small manufacturers in Georgia?
 - b. What specific needs arise from these problems?
 - c. How well are these needs presently being met?
 - d. What can be done to help meet these needs more effectively?

B. Steps necessary to achieve goals:

1. Accumulate comprehensive data on management problems and needs and reactions to present efforts to meet these needs.
2. Analyze in depth the management and operations of a number of firms whose problems, needs and reactions are representative of those of the whole group.
3. Evaluate the problems, needs and reactions identified in steps 1 and 2 and make specific recommendations for broadening and strengthening management assistance programs and services for small business.
4. Present in meaningful form the results of the detailed study of the problems and needs of small manufacturing management.

C. Methodology:

1. Phase 1:
 - a. Design preliminary questionnaire to elicit responses which will provide basic information required in identifying specific types of management problems and needs; determining familiarity with, use of, and reaction to available management assistance services of the Small Business Administration; and identifying firms with representative problems and needs for more detailed study and analysis.

- b. Validate preliminary questionnaire and construct final questionnaire.
 - c. Identify those manufacturing firms in the State which properly fall into the small business category and select those firms to be surveyed.
 - d. Conduct mail survey of selected firms.
 - e. Follow up questionnaires by mail, telephone and personal interview to insure reliability of the sample.
 - f. Accumulate, tabulate and analyze survey results.
2. Phase 2:
- a. Select firms for detailed analysis on the basis of information gained in Phase 1.
 - b. Visit, investigate, study and analyze the firms chosen.
 - c. Develop case histories of the firms, including description and analysis of patterns of problem development.
3. Phase 3:
- a. Evaluate the problems, needs and reactions identified in Phases 1 and 2 and determine answers to questions of the following types:
 - 1) What are the real problems and needs of management and operations in small manufacturing firms?
 - 2) How familiar are small manufacturers with the services that are now available through the Small Business Administration?
 - 3) How widely used are small business management assistance services?
 - 4) How helpful have those services been which small businesses are familiar with and have used?
 - 5) Is there a need for increased dissemination of information as to services and facilities available from federal, state and local sources?
 - 6) Which management assistance services should be expanded or added?
 - 7) What is the demand and need for an expanded program of direct management counseling service for small business?

4. Phase 4:

a. Prepare and publish final project report. This report will include the following:

- 1) Interpretation of survey results.
- 2) Implications of detailed studies.
- 3) Evaluation and recommendations.
- 4) Discussion of methodology.

WORK ACCOMPLISHED

On December 31, 1959, all work specified under Phase 1 of Project B-170 had been completed or was in process and nearing completion. This phase of the project was concerned with the accumulation of comprehensive data on the problems and needs of small manufacturing operations and management and on the reactions of small manufacturers to present efforts to meet these needs. A description follows of the methods used, problems encountered, and results obtained in accomplishing each step of the initial phase of the research project.

Design of questionnaire

To insure the elicitation of reliable responses and to encourage the participation of as many firms as possible, considerable care was taken in designing the questionnaire and in drafting the covering letter which were used in surveying the problems and needs of small manufacturers. Brevity and completeness were the criteria used in developing the questionnaire form. Questions were eliminated which did not contribute directly to the identification of the respondent, the definition of problems and needs, and the indication of familiarity with, use of, and reaction to management assistance services of the Small Business Administration.

Identification questions were limited to those which made possible the determination of the qualifications of the respondent as "small business" and as a "manufacturer" and which permitted the analysis of responses by geographic location, industrial classification, size, age, type of organization, and union status. Multiple choice and check-list answers were used where possible to make it more convenient for respondents to complete the form and to facilitate the tabulation and classification of responses. To avoid forced and stereotyped answers, however, two free-expression questions were used--one concerning the description of major problems and the other asking for suggestions for improving SBA services.

Validation of questionnaire

The preliminary questionnaire form and covering letter were critically examined by several small businessmen in the area. Comments and suggestions were carefully evaluated and appropriate changes were incorporated in the final draft of the covering letter and questionnaire form.

Questionnaires were mailed to a trial sample of 216 small manufacturers in the State to test the rate of response and the consistency of interpretation by respondents. Two hundred and six questionnaires were delivered (ten were returned by the post office for various reasons), and questionnaires were completed and returned by 71 small manufacturers. The 34.5 per cent rate of response in the sample survey was considerably higher than was anticipated, and the questionnaire answers were unusually complete and consistent. As a result, no further changes were made in the covering letter or questionnaire form.

Copies of the letter and the questionnaire are included as Exhibits 1 and 2 in the Appendix to this report.

Selection of firms to be surveyed

The most time-consuming step in Phase 1 of the project was the development of a mailing list of small manufacturers to be contacted in the questionnaire survey. Since efforts to locate a previously compiled list of this type were unsuccessful, it was necessary to develop an original list from a variety of sources.

It was determined in advance that the survey sample would consist of all small manufacturing firms in the State that could be identified from the sources available. Although the survey would approach total coverage of small manufacturers, it was considered a sample since it was recognized that it would be impractical--if not impossible--to identify every firm in the State that qualified as small business and as a manufacturer. The standard SBA definition of "small business" was used, and a special definition of "manufacturer" was developed for purposes of this study (see Exhibit 3 in the Appendix to this report).

The basic survey list was compiled from the Georgia Department of Labor's records of manufacturing firms covered by the State's Unemployment Compensation Law. The names of a number of firms not covered by this law or omitted from the Department of Labor records for other reasons were picked up from the Georgia Department of Commerce publication Georgia Manufacturers, Producers-Processors, 1958. In addition, local chambers of commerce in several major cities in the State provided lists of manufacturing firms in their areas. Since only local chamber lists included street addresses, it was necessary to search telephone directories from almost every community in the State to complete the mailing list.

Sufficient data were not available in advance to determine precisely which firms qualified as "small manufacturers" and which did not. However, employment figures and Standard Industrial Classification codes made possible the elimination of those companies which obviously did not qualify. The final list was composed of the names and addresses of 4,564 firms which, according to the best available information, were "small manufacturers" under the established project definitions.

Survey of selected firms

Questionnaires and covering letters were mailed to 4,654 small manufacturers throughout the State. One hundred and fifty-two letters were returned by the post office marked "out of business," "unknown," "moved--left no address," etc. A total of 4,412 questionnaires were assumed to have been delivered.

As of December 31, 1959, questionnaires had been received from 995 respondents. Of this number, 305 questionnaires were eliminated either because the respondents did not qualify as small manufacturers, or because the responses were too incomplete to be useable. The remaining 690 questionnaires were from qualified small manufacturers, representing every area of the State and every major industrial classification.

Replies were still being received at the end of the period covered by this report. On December 31, questionnaires had been returned by 21.8 per cent of the companies to whom letters had been delivered. Since that time the rate of response has increased to almost 25 per cent.

Follow-up of questionnaires

Re-contact of companies to follow up on questionnaire returns was not begun before the end of the period covered by this report. In preparation for follow-up contacts, however, returned questionnaires were tabulated by geographic areas and industrial classifications to determine in which areas and industries follow-up activities should be concentrated. The results of this tabulation are displayed in Tables 1 and 2 of the Appendix to this report.

Accumulation, tabulation and analysis of survey results

As completed questionnaires were received, the responding companies were classified according to county of operation and SIC four-digit code. From size, industry and affiliation information, it was determined whether or not

the companies qualified as small manufacturers, and qualifying companies were assigned identification code numbers.

A classification system was developed for identifying problem areas and specific problems indicated in the free-expression answers to question 9 (What major problems have you encountered in developing and managing your company?). Brief codes for tabulation purposes were established for the check-list answers to question 10 (In what areas of your operation would managerial or technical assistance be most helpful?).

A master tabulation card was prepared for each qualified small manufacturer that participated in the survey. This card indicated in abbreviated and code form the company's identification code number, SIC four-digit code, number of employees, age of company, type of organization, union status, county of operation, and answers to questions 9 and 10.

Answers to questions 11 and 12 (relating to the use and evaluation of SBA services) were not included on the master cards since it was felt that a tabulation of answers by industry, size, age, etc., would not be necessary for analysis purposes. A trial analysis by urban and non-urban locations revealed no significant differences in responses; therefore, answers to these questions were tabulated in total without attempting a more detailed breakdown.

Preliminary tabulations of answers to questions 9, 10, 11 and 12 are presented in Tables 3, 4, 5, 6 and 7 in the Appendix to this report. More detailed analysis and interpretation of results were not attempted prior to the end of the period covered by this report since questionnaire returns were not complete and follow-up activities had not begun.

FUTURE PROGRAM

Follow up of responses to the questionnaires mailed to small manufacturers in the State was begun after the end of the period covered by this report and is now in progress. When all returns have been received, survey results will be tabulated and analyzed in detail. This will conclude Phase 1 of the research project. It is expected that this work will be completed by January 31, 1960.

From information developed in Phase 1, approximately twenty small manufacturers will be selected whose problems, needs and reactions are representative of those of the whole group. The management and operations of these firms will be analyzed in depth to discover underlying causes of management problems that are not revealed in survey results. These firms will be visited and investigated by members of the project staff, case histories will be developed, and patterns of problem development will be described and analyzed. Deadline for the completion of this phase of the project is May 15, 1960.

The problems, needs and reactions identified in the first two phases of the project will be carefully analyzed and evaluated, and specific recommendations will be developed for broadening and strengthening management assistance programs and services for small business. A rough draft of the completed research will be forwarded to the Small Business Administration on or before June 30, 1960.

PERSONNEL

Research project B-170 has been guided and directed by Dr. Ernst W. Swanson, Senior Research Economist and Head of Industrial Economics Research. Dr. Kenneth C. Wagner, Head of the Industrial Development Branch, has acted in an advisory capacity and has assisted in the direction of the project. Jerry L. Lewis, Research Scientist and Head of the Manpower and Organization Section, has supervised and assisted in the performance of the detailed work on the project. Biographical sketches and bibliographies of the professional writings of these staff members were submitted with the original project proposal.

Two newly-acquired professional personnel have been assigned to full-time work on the project: Charles H. Sewell, Assistant Research Scientist, and Charles L. Dickson, Research Assistant. Biographies and bibliographies of these men follow.

Charles H. Sewell

Charles H. Sewell was graduated with a B.A. degree from Emory University, Emory University, Georgia, in 1951. He served as Chief Job Analyst and Assistant Personnel Director with the Communicable Disease Center in Atlanta, Georgia, from 1951 through 1955. In this position he performed and directed the work of six personnel specialists in employment, employee relations, wage and salary administration, and related personnel services.

For two years Mr. Sewell was a Staff Analyst with Victor Tabaka & Associates, Management Consultants, Atlanta, Georgia. He participated in projects relating to organizational analysis, wage and salary administration, performance review systems, training programs, market analysis, cost control systems, and management recruiting for client companies. In 1957 Mr. Sewell accepted the position of Executive Staff Assistant with Gulf States Paper Corporation, Tuscaloosa, Alabama. Work with this firm was in the fields of market research, sales management, administrative control systems, personnel procurement, and special projects involving the collection, analysis and evaluation of sales and manufacturing data.

Prior to joining the Industrial Development Branch staff in 1959, Mr. Sewell directed his own management consulting business. He has also served as Instructor in Industrial Relations at Georgia Institute of Technology and as guest lecturer in Public Administration courses at Emory University.

Mr. Sewell has written and published numerous reports for client companies. The most recent include "Conservation of Capital and Capacity," "Standards of Performance," "Personnel Policy Manual," and "Summary Report on Market Conditions." He contributed to a report on manpower utilization made by the Regional Director of the Bureau of Labor Statistics before a Congressional sub-committee, and has assisted in the preparation of other reports of similar nature on management problems.

Charles L. Dickson

Charles L. Dickson was graduated with an A.B. degree in Science from Emory University, Emory University, Georgia, in 1950. He completed one year of graduate study in English at Emory University and one year of graduate study in Mathematics at Georgia Institute of Technology.

After serving in the U. S. Coast Guard in 1953 and 1954, Mr. Dickson accepted the position of Quality Control Analyst with Swift and Company, Atlanta, Georgia. In this position he performed chemical and statistical analyses of raw materials and finished products. In 1957 Mr. Dickson joined the staff of the Georgia Department of Labor as a Labor Market Analyst. He prepared monthly evaluative analyses of the Atlanta area labor market, developed special labor market and wage reports, and supervised the collection and posting of labor market information and the statistical reporting of local office activities. He began work with the Industrial Development Branch in October, 1959.

Mr. Dickson assisted in the preparation and publication of the Georgia Department of Labor's bi-monthly Atlanta Area Labor Market Report; the unemployment and forecast sections of the monthly Atlanta Area Labor Market Trends; and the Fayette County Labor Market Report.

CONTRIBUTION OF PROJECT TO SMALL BUSINESS FIRMS

The primary objective of Research Project B-170 is to provide the Small Business Administration with basic information which can be used in directing management publications, management development programs, and other management services toward the most critical needs of small manufacturers. The conclusions and findings from this project, therefore, will benefit small business firms by specifying additional or supplementary services which could be provided by the Small Business Administration, directly or through other agencies or institutions, to make the production and management assistance program more practical and useful.

Problems and needs must be more precisely defined and present services must be evaluated in light of these needs before a more comprehensive program of action can be planned. It is the purpose of this research project to accomplish this exploratory work and to recommend specific ways of broadening and strengthening management assistance programs and services for small business.

APPENDIX

Exhibits

1. Covering Letter for Questionnaire Survey
2. Questionnaire Form
3. SBA Project Definitions

Tables

1. Distribution of Questionnaire Returns by Geographic Areas
2. Distribution of Questionnaire Returns by Industry
3. Classification of Problems of Small Manufacturers
4. Areas of Operation Requiring Managerial or Technical Assistance
5. Familiarity with and Use of SBA Services
6. Evaluation of SBA Services
7. Suggestions for Improving SBA Services

Industrial Development Branch
ENGINEERING EXPERIMENT STATION
GEORGIA INSTITUTE OF TECHNOLOGY
ATLANTA 13, GEORGIA


Dear Sir:

Under authority of a recent Act of Congress, Georgia Tech has been commissioned by the Small Business Administration to study the problems and needs of small manufacturers in Georgia. As a result of this study, we expect to develop information which will contribute to an improved and expanded program of assistance for you and other small manufacturers in the State.

So that this program may be tailored to your needs, we would like very much to know what your experience has been in developing and operating your company. Specifically, we are seeking the answers to these questions: What types of operational and managerial problems have you found to be most critical in your business? In what areas of your operation would assistance be most helpful? How useful have present small business assistance programs been to you? The enclosed questionnaire will assist you in sharing this information with us with a minimum of inconvenience to you.

We would appreciate very much your completing the questionnaire as soon as it is possible for you to do so. A stamped self-addressed envelope is enclosed for your convenience in returning the completed form. If we may be of assistance in clarifying the purpose or content of the questionnaire, please do not hesitate to call on us.

Sincerely,

 Jerry L. Lewis
Research Scientist

JLL:eam

P. S. - Even if it is not possible for you to complete the questionnaire, will you please answer as many questions as possible and return the form so that we will not trouble you unnecessarily with a follow-up contact.

SURVEY OF SMALL BUSINESS NEEDS

Firm name _____

Address _____

What products do you manufacture or what processes do you perform? _____

Approximately how many employees do you normally have on your payroll?

- ☐ Less than 25 ☐ 100 to 249 ☐ 500 to 999
☐ 25 to 99 ☐ 250 to 499 ☐ 1,000 or more

How long has your business been in operation?

- ☐ Less than 1 year ☐ 3 to less than 5 years ☐ 10 to less than 20 years
☐ 1 to less than 3 years ☐ 5 to less than 10 years ☐ 20 years or more

What type of organization? ☐ Corporation ☐ Partnership ☐ ProprietorshipAre any of your employees represented by a union? ☐ Yes ☐ NoDo you have any affiliated plants or offices? ☐ Yes ☐ No

If Yes, what is your relation to these affiliates? ☐ Parent ☐ Subsidiary
☐ Branch ☐ Other (specify) _____

Please list the names and locations of affiliated plants: _____

What major problems have you encountered in developing and managing your company? Describe below the two or three specific types of problems that you have found to be most critical in operating your business. Please exclude problems of raising capital, competitive practices, government regulations, etc., since this study is concerned primarily with problems of internal operations and management.)

10. In what areas of your operation would managerial or technical assistance be most helpful? (In the list below, write the figure "1" by the area of greatest need; write the figure "2" by the area of second greatest need; and write the figure "3" by the area of third greatest need. If your most important areas of need are not listed, write them in the spaces provided.)

- | | | |
|----------------------------|-------------------------------------|----------------------------|
| () Accounting methods | () Maintaining stable work force | () Quality control |
| () Cost control | () Maintenance of equipment | () Raw materials supply |
| () Customer relations | () Market information | () Recruiting personnel |
| () Distribution channels | () Meeting contract specifications | () Research & development |
| () Diversification | () Organizational planning | () Sales promotion |
| () Employee relations | () Production methods | () Training employees |
| () Figuring contract bids | () Production scheduling | () _____ |
| () Inventory control | | () _____ |
| () Legal assistance | | () _____ |

11. How familiar are you with the services offered by the Small Business Administration? Which of these services have you used? How helpful have you found these services to be? (Indicate your answers by placing check marks in the proper columns below.)

<u>Service</u>	Have not heard of	Have heard of	HAVE USED AND FOUND SERV Little or no help	Fairly helpful	Very helpful
Publications:					
Management Aids for Small Manufacturers					
Technical Aids for Small Manufacturers					
Small Business Bulletins					
Small Business Management booklets					
"Starting and Managing" booklets					
SBA reference libraries					
Management Development courses					
Management conferences					
Personal counsel and advice on management and technical problems					
Assistance on:					
Securing Government contracts					
Work with other prime contractors					
Research and Development					
New products					

12. To be of greater service to you, which of these programs do you feel should be expanded or what new services should be added?

Please complete and return to:

Industrial Development Branch
Engineering Experiment Station
Georgia Institute of Technology
Atlanta 13, Georgia

Information supplied by:

Title _____

Date _____

Exhibit 3

SBA PROJECT DEFINITIONS

Manufacturer

For purposes of the study of the problems and needs of small manufacturers in Georgia, the definition of the term "manufacturer" is essentially derived from the Standard Industrial Classification definition of "manufacturing." In summary, this includes:

1. Establishments engaged in the mechanical or chemical transformation of inorganic or organic substances into new products.
2. Establishments which are usually described as plants, factories, or mills and which characteristically use power driven machines and materials handling equipment.
3. Establishments which are engaged in assembling component parts of manufactured products, if the new product is neither a structure nor other fixed improvement.
4. Establishments whose final product may be ready for utilization or consumption or may be "semifinished" to become a raw material for an establishment engaged in further manufacturing.
5. Establishments whose production is usually carried on for the wholesale market, for interplant transfer, or to order for industrial users, rather than for direct sale to the domestic consumer.

Specific exclusions in the Standard Industrial Classification definition are the following:

1. Processing on farms if raw materials are grown on the farm and if manufacturing activities are on a small scale without the extensive use of paid labor.
2. Custom grist milling, threshing and cotton ginning.
3. Dressing and beneficiating of ores, and the breaking, washing and grading of coal.
4. Fabricating operations performed at the site of construction by contractors.
5. Assembling, grading and preparing fruits and vegetables for market.
6. Shelling and roasting nuts.
7. Establishments primarily engaged in selling, to the general public, products produced on the same premises from which they are sold, such as bakeries, candy stores, ice cream parlors, shade shops, and custom tailors.

So that this study may concentrate on a more homogeneous group of establishments which are more likely to have similar types of operational and managerial problems, this standard definition of "manufacturer" is further restricted to include only those firms that meet the following qualifications:

1. Establishments which are housed in stationary and permanent plants, factories or mills. This will exclude, for example, portable and temporary logging camps and logging contractors (SIC 2411) and some general sawmills and planing mills (SIC 2421).
2. Establishments in which the production process is the primary function of the organization. This will exclude (1) firms engaged in printing and publishing newspapers, periodicals, books and miscellaneous literature (SIC 271, 272, 273 and 274) where creation of the material printed or published is the primary function; and (2) commercial printing firms (SIC 275) and service industries for the printing trade (SIC 279) where the provision of service is paramount to the manufacture of products.

Table 1

DISTRIBUTION OF QUESTIONNAIRE RETURNS BY GEOGRAPHIC AREAS

(December 31, 1959)

Geographic Area	Number of Returns	Per Cent of Total Returns	Percentage Distri- bution of Small Firms	Differ- ence (%)
Atlanta	205	29.7	30.5	- .8
Albany-Moultrie-Thomasville	68	9.9	8.8	1.1
Savannah-Brunswick	67	9.6	7.4	2.2
Rome-Cedartown-Dalton-Summerville- Layfayette	59	8.6	9.9	-1.3
Macon	53	7.7	6.6	1.1
Valdosta-Waycross	40	5.8	5.2	.6
Athens	38	5.5	5.3	.2
Augusta	38	5.5	5.6	- .1
Carrollton-Newnan-LaGrange- Griffin-Thomaston	36	5.2	6.4	-1.2
Columbus	33	4.8	4.3	.5
Gainesville-Toccoa	31	4.5	4.7	- .2
Milledgeville-Dublin	22	3.2	5.3	-2.1
TOTAL	690	100.0	100.0	----

Table 2
DISTRIBUTION OF QUESTIONNAIRE RETURNS BY INDUSTRY
(December 31, 1959)

SIC No.	Industry	Number of Returns	Per Cent of Total Returns	Percentage Distri- bution of Small Firms	Differ- ence (%)
20	Food	140	20.3	23.4	-3.1
22	Textiles	38	5.5	7.1	-1.6
23	Apparel	44	6.4	9.3	-2.9
24	Wood	88	12.8	21.0	-8.2
25	Furniture	50	7.2	4.9	2.3
26	Paper	8	1.2	1.9	- .7
27	Printing	7	1.0	-	1.0
28	Chemicals	52	7.5	5.3	2.2
29	Petroleum Products	1	.1	.5	- .4
30	Rubber and Plastics	10	1.5	.8	.7
31	Leather	8	1.2	.7	.5
32	Stone, Clay, Glass	78	11.3	7.6	3.7
33	Primary Metals	8	1.2	1.3	- .1
34	Fabricated Metal Products	47	6.8	5.2	1.6
35	Machinery	60	8.7	5.4	3.3
36	Electrical Machinery	10	1.4	1.0	.4
37	Transportation Equipment	14	2.0	1.3	.7
38	Instruments	3	.4	.4	-
39	Miscellaneous	24	3.5	2.9	.6
TOTAL		690	100.0	100.0	----

Table 3

CLASSIFICATION OF PROBLEMS OF SMALL MANUFACTURERS

(Question 9: What major problems have you encountered in developing and managing your company?)

<u>Major Problem Classification</u>	<u>Number</u>	<u>Per Cent</u>
Manpower	389	37.6
Sales	174	16.8
Manufacturing	173	16.8
General Management	74	7.2
Financial Management	66	6.4
Government Controls	46	4.3
Purchasing	34	3.3
Capital	32	3.1
Competitive Practices	32	3.1
Inventory Control	<u>14</u>	<u>1.4</u>
TOTAL	1034	100.0

Note: 37 respondents answered "None" to question 9; 206 left it blank.

Table 4

AREAS OF OPERATION REQUIRING MANAGERIAL OR TECHNICAL ASSISTANCE

(Question 10: In what areas of your operation would managerial or technical assistance be most helpful?)

<u>Area Requiring Assistance</u>	<u>Number</u>	<u>Per Cent</u>
Cost control	220	10.3
Sales promotion	176	8.2
Training of employees	153	7.1
Production methods	141	6.6
Quality control	110	5.1
Diversification	108	5.0
Maintaining stable work force	105	4.9
Research and development	102	4.8
Maintenance of equipment	100	4.8
Distribution channels	95	4.4
Raw materials supply	92	4.3
Recruiting of personnel	90	4.2
Inventory control	89	4.2
Organizational planning	84	3.9
Production scheduling	78	3.6
Market information	78	3.6
Accounting methods	64	3.0
Figuring contract bids	61	2.9
Customor relations	60	2.9
Employee relations	58	2.7
Legal assistance	35	1.6
Meeting contract specifications	30	1.4
Not elsewhere classified	<u>11</u>	<u>.5</u>
TOTAL	2140	100.0

Note: 4 respondents answered "none" to question 10; 48 left it blank.

Table 5

FAMILIARITY WITH AND USE OF SBA SERVICES

(Question 11: How familiar are you with the services offered by the Small Business Administration? Which of these services have you used? How helpful have you found these services to be?)

Service	No Reply		Have Not Heard of		Have Heard of		Have Used	
	No.	%	No.	%	No.	%	No.	%
Publications:								
Management Aids for Small Manufacturers	202	29.3	290	42.0	198	28.7	72	10.4
Technical Aids for Small Manufacturers	222	32.2	316	45.8	152	22.0	46	6.7
Small Business Bulletins	230	33.3	270	39.1	190	27.6	62	9.0
Small Business Management booklets	233	33.8	296	42.9	161	23.3	58	8.4
"Starting and Managing" book- lets	241	34.9	324	47.0	125	18.1	41	5.9
SBA reference libraries	238	34.5	352	51.0	100	14.5	14	2.0
Management Development courses	241	34.9	321	46.5	128	18.6	16	2.3
Management conferences	241	34.9	303	43.9	146	21.2	27	3.9
Personal counsel and advice on management and technical problems	249	36.1	344	49.8	97	14.1	10	1.5
Assistance on:								
Securing government contracts	247	35.8	234	33.9	209	30.3	56	8.1
Work with other prime con- tractors	277	40.1	264	38.3	149	21.6	30	4.4
Research and Development	266	38.6	312	45.2	112	16.2	13	1.9
New Products	274	39.7	295	42.8	121	17.5	23	3.3
TOTAL	3161	35.2	3921	43.7	1888	21.1	468	5.2

Table 6

EVALUATION OF SBA SERVICES

(Question 11: How familiar are you with the services offered by the Small Business Administration? Which of these services have you used? How helpful have you found these services to be?)

Service	HAVE FOUND SERVICE TO BE:						
	Have	Little or		Fairly		Very	
	Used	No	Help	No.	Helpful	No.	Helpful
	No.	No.	%	No.	%	No.	%
Publications:							
Management Aids for Small Manufacturers	72	40	55.6	27	37.5	5	6.9
Technical Aids for Small Manufacturers	46	28	60.9	16	34.8	2	4.3
Small Business Bulletins	62	38	61.3	21	33.9	3	4.8
Small Business Management booklets	58	33	56.9	23	39.7	2	3.4
"Starting and Managing" booklets	41	29	70.7	11	26.8	1	2.5
SBA reference libraries	14	13	92.9	0	0.0	1	7.1
Management Development courses	16	9	56.3	5	31.2	2	12.5
Management conferences	27	13	48.2	8	29.6	6	22.2
Personal counsel and advise on management and technical problems	10	5	50.0	2	20.0	3	30.0
Assistance on:							
Securing government contracts	56	38	67.9	12	21.4	6	10.7
Work with other prime contractors	30	22	73.4	7	23.3	1	3.3
Research and Development	13	11	84.6	2	15.4	0	0.0
New products	23	20	87.0	3	13.0	0	0.0
TOTAL	468	299	63.9	137	29.3	32	6.8

Table 7

SUGGESTIONS FOR IMPROVING SBA SERVICES

(Question 12: To be of greater service to you, which of these programs do you feel should be expanded or what new services should be added?)

<u>Suggested Improvements</u>	<u>Number</u>	<u>Per Cent</u>
Present SBA publications and services should be expanded:	<u>225</u>	<u>27.2</u>
Assistance on securing government contracts	31	3.8
Assistance on developing new products	31	3.8
Assistance on research and development	27	3.3
Management Aids for Small Manufacturers	23	2.8
Technical Aids for Small Manufacturers	23	2.8
Personal counsel and advice on management and technical problems	20	2.4
Management development courses	18	2.2
Assistance on working with private prime contractors	16	1.9
Small Business Bulletins	8	1.0
Small Business Management booklets	8	1.0
SBA reference libraries	7	.8
Management conferences	7	.8
"Starting and Managing" booklets	6	.7
SBA publications and services should be improved:	<u>62</u>	<u>7.5</u>
SBA services should be better publicized	23	2.8
Not familiar enough with SBA services to suggest improvements	21	2.5
SBA should provide technical and management specialists	3	.4
SBA publications should be more specific	3	.4
SBA publications should be less elementary	2	.2
SBA publications should be less technical	1	.1
SBA publications should cover broader field of topics	1	.1
SBA size standards should be lowered to exclude big businesses	2	.2
SBA should assist only those businesses that deserve help	1	.1
SBA assistance should be businesslike and prompt	1	.1
SBA should not expand until present services are fully utilized	1	.1
SBA should provide technical service for fertilizer industry	1	.1
SBA should develop program to assist chenille industry	1	.1
SBA should provide research to improve pecan production	1	.1

Table 7

SUGGESTIONS FOR IMPROVING SBA SERVICES
(Continued)

<u>Suggested Improvements</u>	<u>Number</u>	<u>Per Cent</u>
SBA should concentrate assistance services in the following areas:	39	4.7
Equity and working capital	4	.5
Interpretation of government regulations	3	.4
Interindustry communications	3	.4
Training employees	3	.4
Customer relations	2	.2
Sales promotion	2	.2
Cost control	2	.2
Product distribution	2	.2
Market surveys	1	.1
Unfair price competition	1	.1
More efficient machines	1	.1
Transportation	1	.1
Local industrial development	1	.1
Expansion	1	.1
Model operating ratios	1	.1
Accounting methods	1	.1
Research and development	1	.1
Diversification	1	.1
Testing programs	1	.1
Government competition	1	.1
Pricing policies	1	.1
Customer financing	1	.1
Maintenance of equipment	1	.1
Product design	1	.1
Union abuses	1	.1
Procurement of government surplus equipment	1	.1

Table 7

SUGGESTIONS FOR IMPROVING SBA SERVICES
(Continued)

<u>Suggested Improvements</u>	<u>Number</u>	<u>Per Cent</u>
SBA services not broad enough to be of value:	<u>8</u>	<u>1.0</u>
Company too small to benefit from SBA services	3	.4
Technical problems too unique to benefit from SBA services	2	.2
SBA does not assist in problems of foreign trade	1	.1
SBA does not assist in problems of agriculture	1	.1
Problems confined to people and machine and SBA can not help	1	.1
Generally opposed to SBA and government assistance programs:	<u>31</u>	<u>3.8</u>
The Small Business Administration should be eliminated	10	1.2
None of the SBA services should be expanded and none added	9	1.1
Company needs no government help	4	.5
Too much red tape and ineptness in the Small Business Administration	2	.2
SBA of little practical help	2	.2
Sufficient assistance available outside SBA	2	.2
Could solve own problems if government regulations were simplified	1	.1
Small business needs more state assistance--less federal	1	.1
SBA program is satisfactory in its present form	<u>3</u>	<u>.4</u>
Miscellaneous suggestions:	<u>4</u>	<u>.5</u>
Small business should receive a better tax break	2	.2
Postal rates should be lowered	1	.1
Small business should receive more equitable treatment on government contract work	1	.1
No response	<u>454</u>	<u>54.9</u>

SIGNATURE

The foregoing progress report is respectfully submitted on behalf of the Engineering Experiment Station, Georgia Institute of Technology, by:

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Approved:

Ernst W. Swanson
Project Director



SMALL BUSINESS MANAGEMENT
RESEARCH REPORTS

Identification and Evaluation
of
Problems and Needs
of
Small Manufacturing Management

Prepared for the
Small Business Administration
Washington 25, D. C.



Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia

IDENTIFICATION AND EVALUATION
OF
PROBLEMS AND NEEDS
OF
SMALL MANUFACTURING MANAGEMENT

Prepared under the
Management Research Grant Program
of the
Small Business Administration

by

Jerry L. Lewis
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Industrial Development Branch
Engineering Experiment Station
Georgia Institute of Technology
January, 1961

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FOREWORD

This Small Business study, "Identification and Evaluation of Problems and Needs of Small Manufacturing Management," has been conducted and prepared under the supervision of Mr. Jerry L. Lewis, Project Director for Georgia Institute of Technology.

The research was financed by a grant made by the Small Business Administration, United States Government, under the authority of Public Law 699 (85th Congress).

Only a limited number of copies of this report have been printed. It is available for reference in any of the Small Business Administration offices throughout the United States or at many reference libraries. Copies of the report also may be purchased at a nominal charge directly from Georgia Institute of Technology.

Summaries of this study are being printed and will be available in reasonable quantities. These summaries may be secured from SBA field offices or from the Small Business Administration, Washington 25, D. C.

The Small Business Administration assumes no responsibility for the accuracy of the data contained herein, nor does it necessarily endorse any opinions, conclusions or recommendations which may be a part of this report.

January, 1961

Philip McCallum
Administrator
Small Business Administration

I. INTRODUCTION

Objectives

Almost 20 years ago Senator James E. Murray, Chairman of the Special Senate Committee to Study Problems of American Small Business, distributed more than 43,000 letters to trade associations, chambers of commerce, and small businessmen, asking them to list what they considered to be the most critical problems of small business. A tabulation of the 3,390 individual problems submitted in response to this letter indicated that the following were the major problem areas of small business (in order of frequency):

1. Competitive conditions resulting from the growing concentration of economic control and extension of monopolistic practices.
2. Need for risk capital and low-cost operating loans.
3. Inequitable tax assessments.
4. Objections to certain Government practices, such as filing Government reports, Government competition, subsidizing of cooperatives, Works Projects Administration, Federal Surplus Commodities Corporation.
5. Application of the wage-and-hour law. ^{1/}

It is significant to note that all of these major problem areas, with the possible exception of capital needs, are concerned directly with external influences which affect the climate in which small business operates. Although capital needs are related to internal conditions, the fulfillment of these needs depends upon external factors; in this sense, then, capital needs are not unlike the other problem areas. In any event, it is evident from the results of this survey that the perplexities of external conditions over which the small business operator has little or no control greatly overshadow the problems of internal operations and management in the minds of many small businessmen.

^{1/} Small Business Problem Discussions, prepared by Professor Biagio DiVenuti, Boston University, U. S. Government Printing Office, Washington: 1941, p. 6.

The emphasis given to these types of environmental problems by the Murray Committee survey and similar studies has led to legislative action which has been favorable to small business. As desirable and as beneficial as this emphasis has been, however, it has tended to obscure the equally critical and perhaps more basic problems of internal operations and management. While the Small Business Administration has made considerable progress in its management and technical assistance program, the fact remains that the internal problems of small business have received relatively little attention.

One respondent in the survey cited above stated very succinctly the seriousness of the internal aspects of operating a small business: "From my viewpoint there is only one problem of the small business and that is, common sense enough to evaluate the need for the business and management ability enough to successfully operate it after it has been determined there is a need for the business." ^{1/} Although general and somewhat oversimplified, this statement expresses a fact of business life that is difficult to deny. If there is no economic need for a business, little can or should be done to salvage it. There is a real need, however, for small businessmen to develop the managerial ability required to operate a business successfully--and it is in this area that assistance efforts should prove to be extremely fruitful.

Before the most effective assistance can be offered to small business managers, a better understanding is needed of the problems that are encountered in developing and managing small businesses and of the needs for managerial and technical assistance that grow out of these problems. It is the primary objective of the research study which is covered by this report to identify these problems and needs and thus provide the basis for developing more practical and useful management and technical assistance programs for small business. More specifically, this study seeks to provide objective and meaningful answers to these questions: What types of operational and managerial problems are most critical to small businesses? What specific needs arise from these problems? How well are these needs presently being met? What can be done to help meet these needs more effectively?

^{1/} Ibid., p. 31.

Scope

The scope of this study is intentionally restricted to avoid the lack of definitiveness that is inherent in many broad surveys. Other studies, including the one referred to above, have consistently classified the problems of small business into three major categories: "unfair" competitive practices, the need for financial assistance, and unpopular government regulations and requirements. While recognizing the seriousness of these external problems, this study purposely excludes them from consideration so that attention may be more sharply focused on those specific problems and needs of small business that are directly related to internal operations and management.

Further restrictions were necessary in order to limit the research phase of the study to a workable size and to make possible more comprehensive coverage and analysis in greater depth. Rather than attempting the impractical and virtually impossible task of surveying the problems and needs of all types of small businesses throughout the country, the study is confined to small manufacturing firms located within the state of Georgia. This does not mean, of course, that the findings of the study are restricted geographically or by type of business. While the results are admittedly more specifically applicable to small manufacturers in Georgia, many of the problems and needs which are identified in the study are not conditioned by location nor by the peculiarities of manufacturing operations, the evaluation of assistance services is at least regional in application, and the general principles of small business management which are developed in the study are universal in nature.

Finally, the study is confined to existing businesses. The alternative approach--an analysis of business failures--would have yielded less reliable results because causal factors would have been obscured by the passage of time, and individuals who had first-hand knowledge of the problems and needs of the businesses before their failures would have been difficult, if not impossible, to locate. A study of existing firms has the added advantage of permitting the identification of current problems and needs and the investigation of the approaches used by successful firms in overcoming operational and managerial problems.

Approach ^{1/}

Recognizing that a consideration of the problems of small business would be impractical without the participation of those who are best acquainted with these problems, this study is based on the experiences, opinions and reactions of 757 small businessmen who have been operating manufacturing enterprises for periods of time ranging from a few months to more than 50 years. The voluntary participants in the study operate proprietorships, partnerships and corporations that range in size from one employee to more than 250 and that represent every major manufacturing group except ordnance and tobacco products.

To assure broad participation in the study, questionnaires were sent to every manufacturing firm in the State that could be identified from available records as being qualified for inclusion in the survey. Firms that obviously did not fit the standard definition of "small business" were excluded, as were manufacturers that did not have stationary plants and businesses that were predominantly service organizations although technically classified as "manufacturers." No doubt others were unintentionally omitted because they were not listed in available reference sources.

Each small manufacturer contacted in the questionnaire survey was asked to identify his organization, to describe the two or three specific types of problems that he had found to be most critical in developing and managing his company, to rank in order of importance the areas in which managerial or technical assistance would be most helpful, to indicate his familiarity with and use and evaluation of SBA services, and to suggest how assistance programs could be of greater service to small businessmen. To conform with the stated objectives of the study, respondents were asked to exclude from consideration problems of raising capital, competitive practices, government regulations, etc., and to specify only those problems relating to internal operations and management.

^{1/} A detailed discussion of methodology is found in Appendix B at the end of this report.

While the results of the questionnaire survey provided much useful basic data, it was felt that a more detailed analysis of the problems and needs of some representative small businesses would aid in understanding and interpreting the survey findings. Twenty small manufacturing firms, therefore, were chosen for case study analysis. Firms were selected which were reasonably typical of the participating group in terms of industrial classification, location, size, age, type of organization, union status, and types of problems and needs. Personal investigation and observation of the operations of these firms, together with detailed interviews with company officials and employees, not only resulted in a better understanding of problems and needs, but also made possible the development of some general principles of successful small business management.

As indicated, the approach throughout the study has been to rely on actual experiences and reactions of small businessmen rather than on theories and preconceived conclusions. It is the aim of this approach to provide practical basic information on what small businessmen themselves consider their most urgent problems and needs so that more comprehensive and useful assistance programs and services may be developed and applied by the Small Business Administration and by other groups that are interested in strengthening small business management in this country.

Because of the approach used, this report of the results of the survey of problems and needs is directed primarily to those who are interested in and capable of assisting small businessmen in solving their problems and fulfilling their needs. This study should also prove beneficial to the small businessman in other more direct ways--not only by reassuring him that his problems are not unique, but also by giving him some ideas of how other small businessmen have prevented or solved problems by applying certain basic principles of small business management.

II. PROBLEMS ENCOUNTERED IN DEVELOPING AND MANAGING SMALL BUSINESSES

Types and Classifications of Problems

According to a significant majority of the small manufacturers who responded to the questionnaire survey of small business problems and needs, the most critical problems that small businessmen face in developing and managing manufacturing enterprises are related to the attraction, development, motivation, and utilization of manpower resources.

Of the 1,169 problems cited by survey respondents, a total of 411--or more than 35 per cent--were classified as manpower problems (see Table 1). The fact that this was more than twice the number reported in the next most frequently listed problem classification emphasizes the overwhelming preponderance of problems in the manpower field.

Difficulties in manufacturing operations and the sales function received about equal mention by the survey respondents. Each accounted for a little more than 15 per cent of the total number of problems reported. Although given considerably less emphasis than personnel problems, both manufacturing and sales problems were reported significantly more frequently than were problems in any other major classification.

In order of frequency, other problems reported were in the areas of general management, financial management, capital, government regulations, purchasing, competitive practices, and inventory control. Each of these areas accounted for less than 8 per cent of the total number of problems submitted by respondents.

It is possible that the questionnaire instructions to exclude problems of raising capital discouraged some respondents from mentioning difficulties encountered in internal financial management. It is unlikely, however, that this made a significant difference in the overall survey results. In fact, the exclusion instructions failed to prevent the reporting of 52 problems in raising capital, 48 problems with government regulations, and 38 problems resulting from competitive practices. Most of these externally influenced problems were expressed similarly to that of one respondent:

Table 1

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(All Respondents)

<u>Major Problem Classification</u>	<u>Number</u>	<u>Per Cent</u>
Manpower	411	35.2
Manufacturing	185	15.8
Sales	181	15.5
General Management	87	7.4
Financial Management	75	6.4
Capital	52	4.4
Government Regulations	48	4.1
Purchasing	40	3.4
Competitive Practices	38	3.3
"None"	38	3.3
Inventory Control	<u>14</u>	<u>1.2</u>
TOTAL	1,169	100.0

"If you exclude problems of capital, competition, and government regulations, we have no problems."

Of interest, if not significance, is the fact that 38 respondents stated without qualification that they had encountered no problems in developing and managing their businesses. Another 235 respondents left blank the answer to the question of problems of internal operations and management. This does not necessarily mean, of course, that these companies had failed to encounter problem situations in their development. No attempt is made to interpret the meaning of a failure to answer this question on the survey form, since such an interpretation would be presumptuous and perhaps invalid.

A consideration of the specific types of problems encountered in developing and managing small manufacturing firms (Table 2) reemphasizes the seriousness of personnel problems in small business management. Four of the first five most frequently reported individual problems are related to recruiting and training employees. By far, the problems of finding and developing qualified non-management personnel are of greatest concern to small manufacturers.

Table 2

TYPES OF PROBLEMS ENCOUNTERED IN DEVELOPING AND MANAGING
SMALL MANUFACTURING FIRMS
(All Respondents)

<u>Type of Problem</u>	<u>Number</u>	<u>Per Cent</u>
Recruitment of non-management personnel	91	7.8
Training of non-management personnel	79	6.8
Training of management personnel	45	3.8
Sales promotion	45	3.8
Recruitment of management personnel	43	3.7
Distribution channels	40	3.4
Cost control	40	3.4
Employee job interest	39	3.3
"None"	38	3.2
Product diversification	35	3.0
General problems of capital	31	2.7
General competitive practices	31	2.7
General government regulations	29	2.5
Quality control	28	2.5
Availability of raw materials	25	2.1
Manufacturing methods	24	2.0
Research and development	22	1.9
General management problems	21	1.8
Labor turnover	18	1.5
Planning and scheduling production	18	1.5
Technical engineering assistance	18	1.5
Wage rates	17	1.4
Production space	15	1.3
Collection of accounts receivables	15	1.3
Organization structure	15	1.3
Seasonal sales	14	1.2
Pricing policies	14	1.2
Labor productivity	13	1.1
Maintenance of equipment	13	1.1
Inventory control	13	1.1
Coordination of operations	12	1.0
Miscellaneous (weather, natural conditions, etc.)	12	1.0
Accounting methods	11	0.9

Table 2 (continued)

<u>Type of Problem</u>	<u>Number</u>	<u>Per Cent</u>
Seasonal layoffs of personnel	10	0.8
Machine design	10	0.8
Work flow	10	0.8
Short-term capital needs	10	0.8
Government tax structure	10	0.8
Employee relations	9	0.8
Long-term capital needs	9	0.8
Lack of management assistance (due to size)	8	0.7
Market information and opportunities	8	0.7
General sales problems	8	0.7
Transportation	8	0.7
Absenteeism	7	0.6
Comprehensive market research	7	0.6
Buildings and other facilities	7	0.6
Modernization of manufacturing equipment	7	0.6
General financial management problems	7	0.6
Freight rates	7	0.6
Selection of non-management personnel	6	0.5
Job descriptions and job evaluation	6	0.5
Waste control	6	0.5
Costs of raw materials	6	0.5
Paperwork required by government regulations	6	0.5
General manufacturing problems	5	0.4
Planning operations	5	0.4
"Big business" competition	5	0.4
Customer relations	4	0.3
Technical advice on purchasing new products	4	0.3
Paperwork control	4	0.3
Selection of management personnel	3	0.3
Union relations	3	0.3
Demands on supervision (caused by poor labor)	3	0.3
General manpower problems	3	0.3
Sales forecasting	3	0.3
Purchasing efficiency	3	0.3
Legal assistance	3	0.3
Government regulations covering employment	3	0.3
Employee morale	2	0.2
Employee benefits	2	0.2
Sales leads	2	0.2
Materials handling	2	0.2
Sources of special equipment	2	0.2
Interest rates	2	0.2
Competition from agents and imports	2	0.2

Table 2 (continued)

<u>Type of Problem</u>	<u>Number</u>	<u>Per Cent</u>
Performance review needs	1	0.1
Personnel records	1	0.1
Employee discipline	1	0.1
Accident prevention	1	0.1
Product design and packaging	1	0.1
Long-term financial planning	1	0.1
Short-term budgeting	1	0.1
Warehousing efficiency	1	0.1
TOTAL	1,169	100.0

It should be noted in Table 2 that the problems of selecting management and non-management personnel are listed separately from those concerned with recruiting personnel. Although the two terms are sometimes used interchangeably, the term "selection" is used here to identify those problems which were specifically designated as resulting from difficulties in choosing the best qualified employees, while the term "recruitment" is used to identify those problems which were designated as resulting from difficulties in attracting qualified employees. When the problems of selecting employees are added to those of recruiting and training employees, the importance of resolving problems relating to staffing small business is even more greatly magnified.

Thirty-eight respondents expressed great concern over the problems created by the apparent lack of job interest on the part of employees. Several felt that there was a growing tendency for young workers to expect something for nothing--a trend some related to the present social, economic and political climate. With the possible exception of those who stated strong objections to certain government regulations, the respondents who reported problems of employee job interest expressed themselves more fervently on this problem than on any other. Quoted from questionnaire responses, the following excerpts illustrate the general tone of these expressions:

A large number of people today don't care whether they do a job right or wrong. They feel they can always "go to the government." Unemployment rules and regulations are fine and proper--but often misused.

Ingraining a sense of loyalty, responsibility and allegiance to job. Too many are concerned with built-in security, rather than trying to earn their security from the "sweat of the brow."

This ever present problem (labor) has grown progressively worse. The trend toward socialism seems to have destroyed the willingness of people to give an honest day's work. The trend toward "something for nothing," "the government owes me a living," indifference, etc. It is most difficult to find people today that are not obsessed with one or more of the above traits.

Outside of the personnel area, the problem most frequently listed was that of sales promotion, followed closely by the related problem of establishing effective distribution channels. The need for product diversification was reported by 35 respondents to be a critical area of concern. Less attention was given by respondents to other types of sales problems (in order of frequency): seasonal sales, pricing policies, market information and opportunities, general sales problems, comprehensive market research, customer relations, sales forecasting, sales leads, and product design and packaging.

Although problems relating to manufacturing were second in number only to those of manpower in the overall tabulation of responses, no single type of manufacturing problem was listed in the first ten most frequently reported problems of small business. Problems of quality control, manufacturing methods, and research and development were mentioned most often, followed by difficulties in planning and scheduling production, the need for technical engineering assistance, inadequate production space, and problems in maintaining equipment. No other type of manufacturing problem accounted for as much as one per cent of the total number of problems reported.

More than half of the problems of financial management were concerned with the control of costs. In fact, problems of cost control were exceeded in frequency of mention only by problems of recruiting and training personnel and sales promotion. Other problems of financial management--reported by relatively few respondents--included collection of accounts receivable, accounting methods, general financial planning, and short-term budgeting.

Problems of general management in most cases were not expressed explicitly enough to be classified other than as "general management problems."

A few respondents did specify, however, that they had had difficulties in developing an effective organization structure, coordinating operations, coping with miscellaneous management problems, solving transportation problems, combating inequitable freight rates, planning operations, controlling paperwork, and securing legal assistance.

Purchasing problems included, in order of frequency, availability of raw materials, costs of raw materials, the need for technical advice on purchasing new products, purchasing efficiency, and sources of special equipment. Inventory control was cited as a problem by 13 respondents, and one small manufacturer reported that warehousing efficiency was of critical importance in the development of his company.

Analysis of Problems by Industry

The major problems encountered in developing and managing small manufacturing firms were analyzed by two-digit industry groups to determine if certain types of problems were more prevalent in one industry than in another. A summary of this analysis is displayed in Tables 3 and 4. Table 3 shows the percentage distribution by major problem classification of the total number of problems reported by small manufacturers in each industry group. The most frequently reported individual problems of firms in each major industry group are listed in Table 4. More than one problem is shown for an industry group in those cases where two or more problems received equal mention as the most prevalent.

The significant facts to be derived from this analysis are that problems of small manufacturers vary relatively little from industry to industry and that manpower problems predominate in practically all industries.

In 15 of the 19 industry groups, the three most frequently mentioned problem areas were the same as those in the overall distribution of problems, although not all of them corresponded in order of magnitude (see Tables 1 and 3). Problems relating to the manufacturing function were not included in the three most frequently mentioned problem areas in the fabricated metal products industry and the electrical machinery industry. Problems relating to the sales function were not included in the three most frequently mentioned problem areas in the lumber and wood products industry and the primary metals industry.

Table 3

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(By Major Industry Group)

SIC	Industry	No.	Man- power %	Manu- fact- uring %	Sales %	Gen. Mgt. %	Finan- cial Mgt. %	Capi- tal %	Govt. Regs. %	Pur- chas- ing %	Compe- tition %	Inven- tory %
20	Food	209	31	16	19	10	5	5	5	4	4	1
22	Textiles	67	39	24	26	5	1	1	3	-	-	1
23	Apparel	77	51	10	14	6	8	3	4	-	3	1
24	Wood	137	35	11	9	7	9	5	7	12	4	1
25	Furniture	83	43	21	7	5	7	5	4	6	2	-
26	Paper	15	13	33	27	7	13	-	-	-	-	7
27	Printing	16	50	19	--	6	6	13	-	-	6	-
28	Chemicals	101	26	19	15	14	5	6	5	2	7	1
29	Petroleum products	1	100	--	--	--	-	-	-	-	-	-
30	Rubber and plastics	17	23	41	18	--	-	6	-	6	6	-
31	Leather	15	7	33	33	13	-	-	-	-	7	7
32	Stone, clay and glass	96	42	14	10	10	9	6	4	5	-	-
33	Primary metals	17	29	23	6	6	12	-	-	-	18	6
34	Fabricated metal products	73	51	7	18	10	10	1	1	1	--	1
35	Machinery	112	31	17	24	5	5	5	5	2	5	1
36	Electrical machinery	15	46	7	13	7	20	-	-	-	-	7
37	Transportation equipment	21	14	24	33	10	14	5	-	-	-	-
38	Instruments	4	25	25	50	--	--	-	-	-	-	-
39	Miscellaneous	55	49	16	13	2	4	7	7	-	2	-

Table 4

MOST FREQUENTLY REPORTED INDIVIDUAL PROBLEMS OF FIRMS
IN MAJOR INDUSTRY GROUPS

<u>SIC</u>	<u>Industry</u>	<u>Type of Problem</u>
20	Food	Employee job interest
22	Textiles	Recruitment of non-management personnel; sales promotion
23	Apparel	Recruitment of non-management personnel
24	Wood	Availability of raw materials
25	Furniture	Recruitment of non-management personnel
26	Paper	Product diversification; manufacturing methods; cost control
27	Printing	Recruitment of non-management personnel
28	Chemicals	General competitive practices
29	Petroleum products	Training of management personnel
30	Rubber and plastics	Maintenance of equipment; research and development
31	Leather	Product diversification; planning and scheduling production
32	Stone, clay and glass	Training of non-management personnel
33	Primary metals	Recruitment and training of non-manage- ment personnel; manufacturing methods; general competitive practices
34	Fabricated metal products	Recruitment of non-management personnel
35	Machinery	Recruitment of non-management personnel
36	Electrical machinery	Recruitment and training of management personnel; distribution channels; accounting methods
37	Transportation equipment	Cost control
38	Instruments	Training of non-management personnel; sales promotion; pricing policies; manufacturing methods
39	Miscellaneous	Training of non-management personnel

Not unexpectedly, the distribution of problems by industry varied most widely from the overall distribution in those industries where the number of problems reported were least in number. The reliability of the results in these cases is open to question because of the limited size of the samples.

One notable exception occurred in the lumber and wood products industry where the size of the sample was sufficiently large to indicate reliable results. Twelve per cent of the total number of problems reported by firms in the industry were related to purchasing, whereas less than 4 per cent of the total number of problems reported by firms in all industries were concerned with this function. As indicated in Table 4, the one most frequently reported problem in this industry was in the purchasing classification--the availability of raw materials. The significance of this industry problem was investigated during the case study phase of the project, and an interpretation of the findings is discussed in a later section of this report.

A consideration of the most frequently reported individual problems of firms in major industry groups stresses again the widespread nature of problems relating to manpower resources (see Table 4). The No. 1 problem of firms in 13 of the 19 major industry groups has to do with recruiting, training and motivating employees. The exception in the wood industry is noted above.

Firms in the paper industry are chiefly concerned with problems of product diversification, manufacturing methods, and cost control; firms in the rubber and plastics industry with maintenance of equipment and research and development; firms in the leather industry with product diversification and planning and scheduling production; and firms in the transportation equipment industry with cost control. Although reasonably logical conclusions could be surmised from these results, the limited size of the samples (in no case more than 21) would cast serious doubts on any such conclusions.

The results in one industry deserve further mention, however. Of the more than 100 problems reported by firms in the chemicals industry, the most frequently reported problem was that of general competitive practices.

The fact that external problems of competition were specifically excluded by the questionnaire instructions makes this response even more noteworthy. An explanation of this somewhat unique response was sought in the case study analysis, and the resulting interpretation is described in a later section of this report.

Analysis of Problems by Size of Organization

Regardless of the number of workers employed, the most prevalent problems that small manufacturers encounter in developing and managing their businesses are again confirmed to be those relating to the procurement, development, and utilization of manpower. This conclusion is based on the data presented in Table 5. In each size category, manpower problems predominate by a substantial margin.

It is interesting to note that in each progressively larger size category the relative number of manpower problems increases. While only 34 per cent of the problems reported by firms with less than 25 employees are related to manpower, 37 per cent in the 25-99 employee category and 42 per cent in the 100-249 employee category are classified as manpower. (The pattern follows in the category of firms with 250 or more employees, but the sample is too small to be considered.) Rather than regard this as a mere chance happening, it seems more reasonable to assume that it is representative of the fact that manpower problems are likely to grow as a company increases its number of employees. At some point in a company's development, perhaps too often beyond the limits of small business, it is usually found that a specialized personnel function must be established to cope with the growing manpower problems. Only then are manpower problems likely to cease to grow as the company increases in size.

In those responding firms with less than 25 employees, problems of sales were reported more frequently than were manufacturing problems. This was reversed by firms in the next larger group (25 to 99 employees), and problems of manufacturing and sales received equal mention by firms with from 100 to 249 employees. These results probably have valid significance. In small manufacturing firms, the manufacturing processes are generally uncomplicated and the expansion of sales is of primary consideration.

Table 5

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING AND
MANAGING SMALL MANUFACTURING FIRMS
(By Size of Organization)

Major Problem Area	Number of Employees			
	Less than 25 % of 550	25-99 % of 440	100-249 % of 130	250 or more % of 11
Manpower	34	37	42	45
Manufacturing	14	19	16	9
Sales	18	14	16	27
General Management	8	8	7	--
Financial Management	7	6	7	--
Capital	6	4	2	--
Government Regulations	4	5	2	--
Purchasing	4	3	2	9
Competitive Practices	4	2	3	--
Inventory Control	1	1	3	9

As a company grows, production facilities must be expanded to meet increased sales (assuming that the emphasis on sales has been fruitful), and problems of manufacturing then assume a dominant role. Apparently a plateau is reached at some point in a company's growth where production and sales are reasonably well balanced. It is likely that the cycle repeats itself as the company continues to grow.

Based on the results of this survey, there is little evidence that size of organization has any substantial effect on the relative seriousness of problems of general management, financial management, capital, government regulations, purchasing, competitive practices, and inventory control.

Analysis of Problems by Age of Organization

An analysis by age of organization of problems encountered in developing and managing small manufacturing firms reveals no consistent pattern that would indicate a close relationship between company age and problem development (see Table 6). The effect of age was neutralized somewhat by

Table 6

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(By Age of Organization)

Major Area of Need	Age of Organization					
	Less than 1 year	1 to less than 3 years	3 to less than 5 years	5 to less than 10 years	10 to less than 20 years	20 years or more
	% of 9	% of 77	% of 105	% of 251	% of 329	% of 360
Manpower	67	36	30	45	32	35
Manufacturing	11	12	17	12	18	19
Sales	--	17	16	17	16	16
General Management	11	6	5	8	7	9
Financial Management	--	9	5	7	8	6
Capital	11	5	10	3	6	3
Government Regulations	--	1	6	4	6	4
Purchasing	--	5	6	3	4	3
Competitive Practices	--	4	5	2	4	4
Inventory Control	--	4	1	1	1	2

the fact that the survey question was worded in the past tense (What major problems have you encountered in developing and managing your company?), although it was assumed that most respondents would be more conscious of current problems than those which arose early in their history. Either this assumption was not valid, or there actually is little correlation between age of organization and types of problems encountered.

It is interesting to note, however, some of the results of this age analysis. Manpower problems predominated in every age group, particularly in the group of firms which range in age from five to 10 years where 45 per cent of the problems reported were related to manpower. Excluding the limited sample in the "less than one year" group, the relative number of sales problems reported varied only one per cent from age group to age group. The percentage of manufacturing problems reported fluctuated from group to group, although some significance may be attached to the fact that manufacturing problems were mentioned relatively more often by firms which had been in operation for 10 or more years.

The excluded problem of capital requirements was reported by 10 per cent of the firms which range in age from three to less than five years. It is possible that at this age many firms are faced with the problem of raising capital for the first time since the initial capital investment and, because the survival of the firms may be involved, the problem is too serious to avoid mentioning by some, regardless of instructions to the contrary.

Analysis of Problems by Type of Organization

Whether a small manufacturing firm is organized as a proprietorship, partnership or corporation seems to have little bearing on the general types of operational and managerial problems that it is likely to encounter. Although some differences exist in the type of problems reported by proprietorships, partnerships and corporations, no outstanding patterns are evident in the analysis of problems by type of organization as shown in Table 7.

A greater percentage of incorporated firms reported problems in the three major problem classifications (manpower, manufacturing and sales) than did proprietorships and partnerships, but it is possible that this resulted from size rather than type of organization. The same pattern followed

Table 7

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(By Type of Organization)

<u>Major Problem</u>	<u>Type of Organization</u>		
	<u>Corporation</u> <u>% of 779</u>	<u>Partnership</u> <u>% of 124</u>	<u>Proprietorship</u> <u>% of 211</u>
Manpower	38	37	33
Manufacturing	17	13	15
Sales	17	14	13
General Management	9	5	6
Financial Management	6	9	9
Capital	4	6	7
Government Regulations	4	6	6
Purchasing	2	6	6
Competitive Practices	3	5	5
Inventory Control	2	1	-

in the analysis of problems by size of organization, and it can be assumed that, on the whole, more of the larger firms are included in the corporation group than in either the partnership group or the proprietorship group.

There is a possibility that there is some significance in the fact that corporations reported a slightly higher percentage of problems in the general management field, since it is not likely that partners and proprietors would be as inclined to admit their own shortcomings in this area as would corporate officers. On the other hand, partnerships and proprietorships reported a larger percentage of problems of financial management and capital, possibly because they are more sensitive to the availability and use of their own funds than they would be to more impersonally provided equity funds.

Analysis of Problems by Union Status

Because of the overwhelming majority of non-union firms participating in the survey, it is difficult to determine with any degree of certainty if there are any real differences in the problems of union and non-union

Table 8

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(By Union Status)

<u>Major Problem</u>	<u>Union Status</u>	
	<u>Union</u> <u>% of 110</u>	<u>Non-Union</u> <u>% of 1,021</u>
Manpower	38	36
Manufacturing	21	16
Sales	16	16
General Management	7	8
Financial Management	8	6
Capital	3	5
Government Regulations	3	4
Purchasing	3	4
Competitive Practices	--	4
Inventory Control	1	1

organizations. Assuming that the sample of responses from union companies is representative, the most significant conclusion that can be drawn from this analysis is that the problems of union and non-union firms are remarkably similar (see Table 8).

The completed questionnaire forms returned by union firms were reviewed carefully to determine to what extent the presence of a union organization influenced the types of problems reported. Of 110 problems mentioned by union firms, only two referred specifically to union relations--one to high union wages and one generally to "union problems." In addition, one respondent mentioned "employee relations," one listed "personnel problems" without further clarification, and one indicated that he was seeking "better methods for working with employees."

III. SMALL BUSINESS NEEDS FOR MANAGERIAL AND TECHNICAL ASSISTANCE

Types and Classifications of Needs

Each small manufacturer contacted in the questionnaire survey was asked to list, in order of importance, the areas of operation in which managerial or technical assistance would be most helpful. To guide the respondents in identifying and evaluating needs, a list of what was judged to be the 22 most critical areas of operation was provided on the questionnaire form, and spaces were made available for writing in additional areas if necessary. Responses were tabulated by frequency of listing and were weighted according to the order of rank specified by respondents. The results of these tabulations, by individual areas of need and by major classifications of needs, are shown in Tables 9 and 10.

Assistance in controlling costs is clearly the most pressing need of a majority of the 757 small manufacturers that participated in the questionnaire survey. Cost control was not only listed more frequently and weighted more heavily by order of rank than any other area of need, but it was also specified as the area of greatest need by more respondents than any other.

It was not possible, of course, to determine from survey results whether respondents who listed cost control as the area of greatest need were referring specifically to recognized requirements for cost control procedures and systems or generally to the desirability of not having to pay quite so much for raw materials, supplies, labor, etc. If the latter were true, it certainly would not be difficult to understand why cost control was selected as the area of greatest need. This question was investigated during the case study phase of the project, and an interpretation is presented in another section of this report.

Sales promotion was the second most frequently listed area in which assistance would be most helpful. Again it is possible that some respondents were more concerned with the general desirability of a larger volume of sales than with specific means of promoting sales. Regardless

Table 9

AREAS OF OPERATION REQUIRING
MANAGERIAL OR TECHNICAL ASSISTANCE
(All Respondents)

<u>Area of Need</u>	<u>Unweighted</u>		<u>Weighted ^{1/}</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Cost control	237	10.3	981	9.6
Sales promotion	192	8.4	870	8.6
Training employees	165	7.2	735	7.2
Production methods	153	6.7	692	6.8
Maintaining stable work force	112	4.9	556	5.5
Diversification	118	5.2	525	5.2
Quality control	120	5.2	522	5.1
Research and development	111	4.8	487	4.8
Raw materials supply	104	4.5	477	4.7
Recruiting personnel	99	4.3	466	4.6
Maintenance of equipment	106	4.6	461	4.5
Distribution channels	102	4.4	454	4.5
Organizational planning	91	4.0	399	3.9
Inventory control	91	4.0	381	3.7
Production scheduling	85	3.7	339	3.3
Market information	79	3.5	329	3.2
Customer relations	62	2.7	313	3.1
Accounting methods	66	2.9	308	3.0
Figuring contract bids	65	2.9	286	2.8
Employee relations	61	2.7	245	2.4
Legal assistance	35	1.5	127	1.2
Meeting contract specifications	30	1.3	126	1.2
"None"	4	0.2	24	0.2
"Wage rates"	2	0.1	11	0.1
"Tax relief"	1	*	6	0.1
"Credit control"	1	*	6	0.1
"Freight rates"	1	*	6	0.1
"Engineering"	1	*	6	0.1
"Delivery to customers"	1	*	6	0.1
"State Legislature"	1	*	6	0.1

Table 9 (continued)

Area of Need	Unweighted		Weighted ^{1/}	
	No.	%	No.	%
"Tax matters"	1	*	5	0.1
"Designing"	1	*	5	0.1
"Absenteeism"	1	*	4	*
"Foreign sales"	1	*	4	*
"Executive help"	1	*	4	*
"Insufficient library facility"	1	*	3	*
"Financial planning"	1	*	2	*
"Shipping"	1	*	2	*
"Getting people to care"	1	*	1	*
"Capital"	1	*	1	*
TOTAL	2,306	100.0	10,181	100.0

^{1/} Weighting method is described in Methodology section.

* Less than 0.1 per cent.

of intent, however, it is evident from the response that many small manufacturers need assistance in promoting the sale of their products.

Considerably behind cost control and sales promotion in frequency of mention as well as weighted order of rank was the third most critical area of need--the requirement for assistance in training employees. This result illustrates the general lack of correspondence between the order of frequency with which manpower problems were reported and manpower needs were specified by respondents. For example, problems encountered in training management and non-management personnel were reported more than three times more frequently than were problems of cost control (the area of greatest need) and almost three times more frequently than were problems of sales promotion (the area of second greatest need).

Other evidence of the dissimilarity in the respondents' ranking of problems and needs is found in the classification of areas of operation requiring managerial or technical assistance (Table 10). While problems of manpower were reported by an overwhelming majority of survey respondents,

Table 10

CLASSIFICATION OF AREAS OF OPERATION REQUIRING
MANAGERIAL OR TECHNICAL ASSISTANCE
(All Respondents)

<u>Major Area of Need</u>	<u>Weighted Number</u>	<u>Per Cent</u>
Manufacturing	2,638	25.9
Sales	2,495	24.5
Manpower	2,022	19.9
Financial Management	1,583	15.6
General Management	543	5.3
Purchasing	477	4.7
Inventory Control	381	3.7
"None"	24	0.2
Government Regulations	17	0.2
Capital	<u>1</u>	<u>*</u>
TOTAL	10,181	100.0

* Less than 0.1 per cent.

needs in the manpower field were ranked third to needs relating to manufacturing and sales. In terms of individual problems and needs, the recruitment of non-management personnel was reported more frequently than any other single problem, while the need for assistance in recruiting personnel (both management and non-management) was tenth in the weighted rank of individual needs.

With the exception of the major differences in the manpower field, the order of frequency with which problems and needs were reported corresponded reasonably well. The areas of manufacturing and sales were ranked in the same order as problems and as needs. The order in which the areas of general management and financial management were ranked as problems was transposed in the ranking of these areas as needs, due primarily to the large number of respondents who specified cost control (classified in the major area of financial management) as the individual area of greatest need. The areas of purchasing and inventory control followed the same order as problems and as needs.

Some differences were expected, of course, in the types of problems that respondents had encountered and the areas of operation in which assistance was needed. The fact that the questionnaire form purposely specified past problems and current needs would account for some differences even if the respondents were not able to discriminate between problems and needs. It is unlikely, however, that this explains the wide difference in the frequency with which manpower problems and manpower needs were reported. The answer to this question was sought during the case study phase of this study, and the findings are discussed in Chapter V, "Interpretation of Survey Results."

Analysis of Needs by Industry

The areas of greatest need for managerial or technical assistance were analyzed by two-digit groups to determine if certain types of needs were more prevalent in one industry than in another. A summary of this analysis is presented in Tables 11 and 12. Table 11 shows the percentage distribution by major areas of operation of the total number of primary needs reported by small manufacturers in each major industry group. ("Primary" needs are stressed since only those needs which were ranked first by respondents are included in the analysis. This was done to simplify the analysis without losing the essential character of the data.) The most frequently reported individual areas of greatest need of firms in each major industry group are listed in Table 12. More than one primary need is shown for an industry group in those cases where equal mention was given to two or more areas of greatest need.

In a similar analysis of problems reported by survey respondents, it was found that problems varied relatively little from industry to industry and that manpower problems predominated in practically all industries. Almost the opposite is found to be true in this analysis of areas of greatest need for managerial or technical assistance. Not only do primary needs vary widely from industry to industry, but neither manpower needs nor any other one area of need predominates in this interindustry comparison.

Table 11

CLASSIFICATION OF AREAS OF GREATEST NEED ^{1/}
 FOR MANAGERIAL OR TECHNICAL ASSISTANCE
 (By Major Industry Group)

<u>SIC</u>	<u>Industry</u>	<u>No.</u>	<u>Sales</u> %	<u>Manpower</u> %	<u>Manufac-</u> <u>turing</u> %	<u>Finan-</u> <u>cial Mgt.</u> %	<u>Pur-</u> <u>chasing</u> %	<u>General</u> <u>Mgt.</u> %	<u>Inventory</u> <u>Control</u> %	<u>Govt.</u> <u>Regulations</u> %
20	Food	121	23	26	21	17	5	5	2	1
22	Textiles	36	36	16	30	6	3	6	3	-
23	Apparel	43	21	28	21	21	-	5	4	-
24	Wood	82	21	11	17	22	23	1	4	1
25	Furniture	61	21	30	18	25	3	3	-	-
26	Paper	11	36	9	37	9	-	-	9	-
27	Printing	8	25	25	25	25	-	-	-	-
28	Chemicals	43	30	21	28	16	-	3	2	-
29	Petroleum products	2	-	-	100	-	-	-	-	-
30	Rubber and plastics	11	37	18	18	9	-	18	-	-
31	Leather	5	40	-	20	20	-	20	-	-
32	Stone, clay and glass	62	27	18	27	19	2	5	2	-
33	Primary metals	8	13	50	25	12	-	-	-	-
34	Fabricated metal products	36	39	19	14	22	-	3	3	-
35	Machinery	53	28	23	15	26	2	6	-	-
36	Electrical machinery	9	22	56	11	11	-	-	-	-
37	Transportation equipment	12	42	-	17	17	8	8	8	-
38	Instruments	5	60	-	40	-	-	-	-	-
39	Miscellaneous	21	29	43	19	9	-	-	-	-

^{1/} Includes only those which could be specifically identified from questionnaire responses as No. 1 needs.

Table 12

MOST FREQUENTLY REPORTED INDIVIDUAL AREAS OF
GREATEST NEED OF FIRMS IN MAJOR INDUSTRY GROUPS

<u>SIC</u>	<u>Industry</u>	<u>Area of Greatest Need</u>
20	Food	Cost control
22	Textiles	Sales promotion
23	Apparel	Cost control
24	Wood	Raw materials supply
25	Furniture	Cost control; training employees
26	Paper	Diversification; production scheduling
27	Printing	Sales
28	Chemicals	Diversification; research and development; sales promotion
29	Petroleum products	Maintenance of equipment; meeting contract specifications
30	Rubber and plastics	Distribution channels; organizational planning; sales promotion
31	Leather	Cost control; diversification; production methods; sales promotion
32	Stone, clay and glass	Maintenance of equipment
33	Primary metals	Maintaining stable work force; production methods
34	Fabricated metal products	Diversification; sales promotion
35	Machinery	Cost control
36	Electrical machinery	Recruiting personnel
37	Transportation equipment	Sales promotion
38	Instruments	Diversification; market information; production methods; research and development; sales promotion
39	Miscellaneous	Training employees

In 11 of the 19 industry groups, the three most frequently mentioned major areas of greatest need were the same as those in the overall distribution of needs, but the order of magnitude corresponded in only one industry group (paper). Primary needs in the printing industry were equally divided among the areas of manufacturing, sales, manpower and financial management. All of the primary needs reported by firms in the petroleum products industry were related to manufacturing.

The need for assistance in the sales area predominated in the following industries: textiles, chemicals, rubber and plastics, leather, fabricated metal products, machinery, transportation equipment, and instruments. Primary needs in the manpower field were reported most frequently in the food, apparel, furniture, primary metals, electrical machinery, and miscellaneous manufacturing industries.

In only one industry was the most frequently reported primary need in some area other than manufacturing, sales, or manpower. As was the case in the reporting of problems, a majority of firms in the lumber and wood products industry indicated that their greatest need was in the purchasing area--specifically, the need for assistance in matters relating to raw materials supply. This unique industry need is discussed in a later section of this report.

Although the need for assistance in controlling costs was reported by a majority of respondents, sales promotion was the individual area of greatest need for more industries than was cost control. In fact, product diversification--an area somewhat related to sales promotion--was the primary need of as many industries as was cost control.

It was not surprising that maintenance of equipment was reported as the primary need of two "heavy" industries: petroleum products, and stone, clay and glass. Also consistent with expectations was the fact that a majority of firms in two so-called "modern" industries--chemicals and instruments--reported that their primary need was for assistance in research and development.

Table 13

CLASSIFICATION OF AREAS OF GREATEST NEED
FOR MANAGERIAL OR TECHNICAL ASSISTANCE
(By Size of Organization)

<u>Major Area of Need</u>	<u>Number of Employees</u>			
	<u>Less than 25</u> <u>% of 309</u>	<u>25-99</u> <u>% of 235</u>	<u>100-249</u> <u>% of 77</u>	<u>250 or more</u> <u>% of 8</u>
Sales	34	22	17	--
Manpower	22	23	23	12
Manufacturing	16	26	26	38
Financial Management	21	15	21	12
Purchasing	4	6	5	12
General Management	2	6	4	25
Inventory Control	1	2	4	--
Government Regulations	1	-	-	--

Analysis of Needs by Size of Organization

An analysis of needs by size of organization (Table 13) indicates that company size has a marked effect on the areas of operation in which small manufacturers feel managerial or technical assistance would be most helpful. Unlike the problems reported by respondents, no single area of need predominates in all size categories.

Perhaps the most significant result of this analysis was the emphasis given to the need for assistance in the sales area by small firms employing less than 25 employees. It was only in this size category that sales needs were clearly outstanding--in each succeeding size category the need for sales assistance dropped off sharply. This probably does not mean that sales assistance is not needed by larger firms but, more likely, that as a company grows other needs develop that are more immediately pressing.

Assistance in the manufacturing function is an example of a need that grows with the complexities of size. In very small firms, manufacturing operations are generally so simple that management is usually capable of coping with production problems without assistance. As the manufacturing

function becomes more complex, more and more assistance is needed in such areas as production planning and scheduling, maintenance of equipment, production methods, quality control, etc. This is borne out by the analysis of needs by size of organization. While only 16 per cent of the primary needs submitted by firms with less than 25 employees were related to manufacturing operations, 26 per cent of the primary needs in the 25-99 employee group and in the 100-249 employee group were in the manufacturing area. (The pattern follows in the category of firms with 250 or more employees, but the sample is too small to be considered.) In every size category except the smallest, manufacturing was reported as the area of greatest need more frequently than was any other area of operation.

Manpower needs remained relatively constant in each size category. This was in sharp contrast to the increasing number of manpower problems reported in each progressively larger size category. Apparently this is related to the general lack of correspondence between problems and needs reported in the manpower field--a subject which is examined more carefully in a later section of this report.

Analysis of Needs by Age of Organization

The areas of greatest need for managerial or technical assistance reported by survey respondents were tabulated by age groups to determine if the types of primary needs were significantly conditioned by the length of time that small manufacturers had been in operation. The results of this analysis are shown in Table 14. Since current needs were specified, it was expected that any age-need relationships discovered in this analysis would be acceptably valid.

Actually, no clear-cut relationship between age of organization and type of need was found. The need for assistance in the sales function prevailed in each age group, but there was no evidence that sales needs were likely to become distinctly more acute at one age than another. On the other hand, it is probably significant that, regardless of age, a small manufacturer can use assistance in accumulating market information, developing distribution channels, and promoting sales.

Table 14

CLASSIFICATION OF AREAS OF GREATEST NEED
FOR MANAGERIAL OR TECHNICAL ASSISTANCE

Major Area of Need	Age of Organization					
	Less than 1 year	1 to less than 3 years	3 to less than 5 years	5 to less than 10 years	10 to less than 20 years	20 years or more
	% of 3	% of 37	% of 53	% of 129	% of 209	% of 198
Sales	33	27	24	26	28	26
Manpower	33	16	23	25	19	24
Manufacturing	--	22	24	24	20	20
Financial Management	33	24	21	19	18	17
Purchasing	--	--	4	4	7	5
General Management	--	5	2	2	5	4
Inventory Control	--	5	2	1	2	2
Government Regulations	--	-	-	-	1	-

Neither manufacturing nor sales needs followed a consistent pattern by age group, although it can be generalized that manufacturing needs are less crucial with older firms. It is interesting to note that, despite the general lack of correspondence between manpower problems and needs, both manpower problems and manpower needs are mentioned relatively more frequently by firms that have been in operation from five to less than 10 years than by firms in any other age group. Since the survey was concerned with past problems and current needs, it was expected that the two would more likely correspond in the lower age groups.

The only consistent pattern in the types of needs by age of organization was in the area of financial management. The relative number of respondents who specified primary needs for assistance in financial management decreased in each progressively higher age classification. Although it is possible (and perhaps probable) that younger firms are more acutely aware of the need for assistance in cost control and other areas of financial management, the limited sizes of the samples in the three lowest age groups and the slight differences in the percentages of response in the three highest age groups make it necessary to accept this assumption only with some reservations.

Analysis of Needs by Type of Organization

An analysis of the primary needs of corporations, partnerships and proprietorships (Table 15) indicates that areas of need differ considerably according to type of organization. It is unlikely, however, that all of these differences can be attributed to factors which are directly related to the legal forms of organizational structure under which the responding firms operate.

The need for assistance in the manufacturing area was reported relatively more frequently by corporations than by partnerships or proprietorships. This, no doubt, resulted from the fact that corporations are generally larger than other types of organizations, and manufacturing operations are more complex in larger companies. This held true in the analysis of needs by size of organization.

Table 15

CLASSIFICATION OF AREAS OF GREATEST NEED
FOR MANAGERIAL OR TECHNICAL ASSISTANCE
(By Type of Organization)

<u>Major Area of Need</u>	<u>Type of Organization</u>		
	<u>Corporation</u> <u>% of 394</u>	<u>Partnership</u> <u>% of 91</u>	<u>Proprietorship</u> <u>% of 126</u>
Sales	28	23	26
Manpower	23	15	28
Manufacturing	24	16	17
Financial Management	15	27	21
Purchasing	4	8	6
General Management	5	4	2
Inventory Control	2	6	1
Government Regulations	1	-	-

Relatively few manpower needs were reported by partnerships, while proprietorships mentioned manpower needs more frequently than needs in any other area of operation. Since no direct relation could be found between the need for assistance in the manpower field and any factors which were peculiar to partnerships and proprietorships, this result could be explained only in terms of the general inconsistency with which manpower problems and needs were reported.

The need for assistance in the area of financial management was reported by a much larger percentage of firms organized as partnerships and proprietorships than those organized as corporations. Since the same pattern followed in the analysis of problems by type of organization, perhaps the same interpretation proposed in the problem discussion holds true here: operators of partnerships and proprietorships are more sensitive to the need for proper management of their own funds than they would be to the management of more impersonally provided equity funds.

Analysis of Needs by Union Status

Unlike the problems reported by union and non-union firms, the needs of small manufacturers whose employees are organized differ widely from those whose employees are not represented by a union. Even more critical

Table 16

CLASSIFICATION OF AREAS OF GREATEST NEED
FOR MANAGERIAL OR TECHNICAL ASSISTANCE
(By Union Status)

<u>Major Area of Need</u>	<u>Union Status</u>	
	<u>Union</u> <u>% of 49</u>	<u>Non-Union</u> <u>% of 580</u>
Sales	26	27
Manpower	33	21
Manufacturing	18	22
Financial Management	18	19
Purchasing	--	5
General Management	4	4
Inventory Control	--	2
Government Regulations	--	*

* Less than .5 per cent.

in this case, however, is the warning that any interpretation of these data may be invalidated by the limited number of responses from union companies. As shown in Table 16, a total of only 49 areas of greatest need were reported by union firms, while a total of 580 areas of greatest need were listed by companies whose employees were not organized.

If it is assumed that the sample of responses from union companies is representative (and no validity is claimed for this assumption), the most significant conclusion to be drawn from the data in Table 16 is that manpower needs are much more critical to union firms than to non-union firms. However, an analysis of the specific areas of need in the manpower field failed to show that the presence of a union organization greatly affected the types of needs reported. Of 16 manpower needs specified by respondents whose employees were represented by a union, one referred to the need for assistance in training employees, five to recruiting personnel, one to maintaining a stable work force, and one to wage rates. None reported the need for assistance in employee relations, although this area was specified on the questionnaire form.

IV. USE AND EVALUATION OF SMALL BUSINESS ADMINISTRATION MANAGEMENT AND TECHNICAL ASSISTANCE SERVICES

Familiarity with SBA Services

Small manufacturers are generally unfamiliar with the management and technical assistance services which are available to them through the Small Business Administration.

This conclusion is based on a mass of evidence accumulated during the questionnaire survey phase of the research study. The publications and services offered under the SBA management and technical assistance program were listed on the questionnaire form, and respondents were asked to indicate their answers to these questions: How familiar are you with the services offered by the Small Business Administration? Which of these services have you used? How helpful have you found these services to be? By listing the services and providing a simple check-list method of response, it was expected that respondents would indicate that they had heard of services with which they had only vague familiarity--which they could identify by sight if not by recall. The significance of the responses should be evaluated, therefore, in light of the fact that the question was weighted slightly in favor of encouraging respondents to indicate a familiarity with SBA services.

Of the 757 small manufacturers that participated in the survey, only 30 (or less than four per cent) indicated that they had heard of all of the publications and services listed. As shown in Table 17, each publication and service was unfamiliar to an average of 43.6 per cent of the respondents, while an average of 21.0 per cent of the respondents reported that they had heard of one or more of the publications and services.

The response to the question of familiarity with each publication and service was left blank by an average of 35.4 per cent of the survey respondents. Although it is always dangerous to attempt to interpret the meaning of an unanswered survey question, it seems logical in this case to assume that a respondent who was unfamiliar with SBA services would be more likely to pass over this question than one who was familiar with them. If this assumption is accepted, added emphasis is given to the inference that small

Table 17

FAMILIARITY WITH AND USE OF SBA SERVICES

<u>Service</u>	<u>Not Indicated</u>		<u>Have Not Heard of</u>		<u>Have Heard of</u>		<u>Have Used</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Publications:								
Management Aids for Small Manufacturers	224	29.6	318	42.0	215	28.4	78	10.3
Technical Aids for Small Manufacturers	244	32.2	347	45.8	166	21.9	51	6.7
Small Business Bulletins	254	33.5	295	39.0	208	27.5	67	8.9
Small Business Management booklets	257	33.9	324	42.8	176	23.2	62	8.2
"Starting and Managing" booklets	266	35.1	355	46.9	136	18.0	44	5.8
SBA reference libraries	263	34.7	384	50.7	110	14.5	15	2.0
Management Development courses	267	35.3	351	46.4	139	18.4	18	2.4
Management conferences	267	35.3	332	43.9	158	20.9	29	3.8
Personal counsel and advice on management and technical problems	275	36.3	375	49.6	107	14.1	12	1.6
Assistance on:								
Securing government contracts	273	36.1	253	33.4	231	30.5	64	8.5
Work with other prime contractors	305	40.3	289	38.2	163	21.5	35	4.6
Research and Development	295	39.0	339	44.8	123	16.2	15	2.0
New products	<u>301</u>	<u>39.8</u>	<u>324</u>	<u>42.8</u>	<u>132</u>	<u>17.4</u>	<u>25</u>	<u>3.3</u>
TOTAL	3,491	35.4	4,286	43.6	2,064	21.0	515	5.2

manufacturers are generally unfamiliar with SBA management and technical assistance services.

In terms of individual SBA publications and services, small manufacturers indicated that they were most familiar with the assistance available in securing government contracts (30.5 per cent of the respondents were familiar with this service) and with the publications "Management Aids for Small Manufacturers" (28.4 per cent) and "Small Business Bulletins" (27.5 per cent). Least familiar to survey respondents were SBA management counseling services (only 14.1 per cent had heard of this service), SBA reference libraries (14.5 per cent), and research and development assistance (16.2 per cent).

Use of SBA Services

Related to the finding that relatively few small manufacturers are familiar with the SBA management and technical assistance program is the even more obvious conclusion that considerably fewer have made use of the publications and services available. The percentage of respondents who indicated that they had used each of the services is shown in the last column of Table 17.

Overall, each publication and service was reported to have been used by an average of only 5.2 per cent of the small manufacturers who participated in the survey. Of those respondents who indicated that they had heard of one or more of the SBA services, an average of 25 per cent reported that they had used the service. This familiarity-use ratio ran as high as 36.3 per cent ("Management Aids for Small Manufacturers") and as low as 11.2 per cent (management counseling services).

The most widely used publications and services were reported to be "Management Aids for Small Manufacturers" (10.3 per cent of the respondents had used this publication), "Small Business Bulletins" (8.9 per cent), government contract assistance (8.5 per cent), and booklets in the "Small Business Management" series (8.2 per cent). Least used by survey respondents were SBA management counseling services (only 1.6 per cent had used these services), SBA reference libraries (2.0 per cent), research and development assistance (2.0 per cent), and management development courses (2.4 per cent).

Evaluation of SBA Services

A majority of the small manufacturers who reported that they had used the services of the SBA management and technical assistance program found these services to be of little value to them in solving their particular problems of internal operations and management.

As indicated in Table 18, each publication and service was reported to be of little or no help by an average of 64.1 per cent of the responding users; to be fairly helpful by an average of 29.1 per cent; and to be very helpful by an average of only 6.8 per cent. Each of the publications and services was judged to be of little or no help by more than half of the respondents who had used the individual services.

Personal counsel and advice on management and technical problems was reported to be very helpful by a larger percentage of users than any other service. Closely following in the relative number of "very helpful" evaluations were management conferences and management development courses. These services were used by relatively few respondents, however. Of the more widely used publications and services, the most helpful were judged by respondents to be government contract assistance and "Management Aids for Small Manufacturers" publications. Neither of these was rated "very helpful" by as many as 10 per cent of the users, however.

If both "fairly helpful" and "very helpful" are considered to be favorable evaluations, the service that received the greatest percentage (48.3) of favorable responses was management conferences. "Management Aids for Small Manufacturers" publications were rated fairly or very helpful by 46.1 per cent of the responding users, and booklets in the "Small Business Management" series were judged to be of some help by 45.1 per cent of the users.

SBA reference libraries were reported by 93.3 per cent of the 15 users of this service to be of little or no help. This was the least well received of the publications and services listed. Assistance in new product development and in research and development followed as the services which were reported to be of least help to users. These services were the only ones that failed to be rated "very helpful" by at least one respondent.

Table 18

EVALUATION OF SBA SERVICES

<u>Service</u>	<u>Have Used No.</u>	<u>Have Found Service to Be:</u>					
		<u>Little or No Help</u>		<u>Fairly Helpful</u>		<u>Very Helpful</u>	
		<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Publications:							
Management Aids for Small Manufacturers	78	42	53.8	30	38.5	6	7.7
Technical Aids for Small Manufacturers	51	30	58.8	19	37.3	2	3.9
Small Business Bulletins	67	41	61.2	22	32.8	4	6.0
Small Business Management booklets	62	34	54.8	25	40.3	3	4.8
"Starting and Managing" booklets	44	31	70.4	12	27.3	1	2.3
SBA reference libraries	15	14	93.3	--	--	1	6.7
Management development courses	18	11	61.1	5	27.8	2	11.1
Management conferences	29	15	51.7	8	27.6	6	20.7
Personal counsel and advice on management and technical problems	12	7	58.3	2	16.7	3	25.0
Assistance:							
Securing government contracts	64	44	68.7	14	21.9	6	9.4
Work with other prime contractors	35	26	74.3	8	22.9	1	2.9
Research and development	15	13	86.7	2	13.3	-	-
New products	<u>25</u>	<u>22</u>	<u>88.0</u>	<u>3</u>	<u>12.0</u>	<u>-</u>	<u>-</u>
TOTAL	515	330	64.1	150	29.1	35	6.8

Suggestions for Improving SBA Services

The small manufacturers that participated in the questionnaire survey were given a free rein in expressing their ideas of how SBA management and technical assistance services could be improved. Specifically, this question was asked: To be of greater service to you, which of these programs do you feel should be expanded or what new services should be added? Space was provided for free-expression answers to this question.

Although 506 of the 757 survey participants failed to respond to this question, others used it as a means of expressing some strong, positive and, in general, constructive ideas. A summary of these responses is shown in Table 19.

Although they represent somewhat differing points of view, the following excerpts from questionnaire responses are related to the one suggestion for improvement that was mentioned most often by survey respondents:

All of the program would be of assistance if small businesses were given more data on how to obtain them. The SBA needs better public relations, even personal representatives, perhaps.

Never having used or heard of most of what you have at the present I don't know what to suggest. I guess we are stupid but we thought this was just another agency set up to help the government spend money.

The services are probably adequate now. More effective publicizing of what they are and how to best utilize them would be most helpful to us.

We appreciate your service and your efforts to aid small businesses and we believe that they could be used to great advantage by businessmen who are lacking in preparation and experience.

I do not think that I should be taxed to provide any of these services. If government would stop forcing socialism on us we would be better off. They should be curtailed rather than be expanded.

While it has been known that the SBA offered the above services, the means to obtain them has not been publicized. Better public relations for SBA would seem indicated. Contacts with SBA, like most governmental agencies, result in being passed from one department head to another with great loss of time and little information. Making the above easy to obtain and having a central clearing house would increase the SBA's value to industry.

Table 19

SUGGESTIONS FOR IMPROVING SBA SERVICES

<u>Suggested Improvement</u>	<u>Number</u>	<u>Per Cent</u>
No response	<u>506</u>	<u>56.2</u>
Present SBA services should be expanded:	<u>240</u>	<u>26.7</u>
Assistance on developing new products	36	4.0
Assistance on securing government contracts	33	3.7
Assistance on research and development	31	3.4
Management Aids for Small Manufacturers	26	2.9
Technical Aids for Small Manufacturers	23	2.6
Personal counsel and advice on management and technical problems	20	2.2
Management development courses	19	2.1
Assistance on working with private prime contractors	16	1.8
Small Business Bulletins	8	.9
Small Business Management booklets	8	.9
Management conferences	7	.8
SBA reference libraries	7	.8
"Starting and Managing" booklets	6	.7
SBA publications and services should be improved:	<u>62</u>	<u>6.9</u>
SBA services should be better publicized	44	4.9
SBA should provide technical and management specialists	3	.3
SBA should provide service for specific industries	3	.3
SBA publications should be more specific	3	.3
SBA publications should be less elementary	2	.2
SBA size standards should be lowered to exclude big business	2	.2
SBA publications should be less technical	1	.1
SBA publications should cover broader field of topics	1	.1
SBA should assist only those businesses that deserve help	1	.1
SBA assistance should be more businesslike and prompt	1	.1
SBA should not expand until present services are fully utilized	1	.1
SBA should concentrate assistance services in specific areas:	<u>41</u>	<u>4.6</u>
Sales promotion	4	.4
Equity and working capital	4	.4
Interpretation of government regulations	3	.3
Inter-industry communications	3	.3

Table 19 (continued)

<u>Suggested Improvement</u>	<u>Number</u>	<u>Per Cent</u>
Training employees	3	.3
Customer relations	2	.2
Cost control	2	.2
Product distribution	2	.2
Market surveys	1	.1
Unfair price competition	1	.1
More efficient machines	1	.1
Transportation	1	.1
Local industrial development	1	.1
Expansion	1	.1
Model operating ratios	1	.1
Accounting methods	1	.1
Research and development	1	.1
Diversification	1	.1
Testing programs	1	.1
Government competition	1	.1
Pricing policies	1	.1
Customer financing	1	.1
Maintenance of equipment	1	.1
Product design	1	.1
Union abuses	1	.1
Procurement of government surplus equipment	1	.1
Generally opposed to SBA and government assistance programs:	<u>24</u>	<u>2.6</u>
SBA should be eliminated	10	1.1
Company needs no government help	5	.6
Too much red tape and ineptness in SBA	3	.3
SBA of little practical help	2	.2
Sufficient assistance available outside SBA	2	.2
Could solve own problems if government regulations were simplified	1	.1
Small businesses need more state assistance--less federal	1	.1
No changes in SBA services suggested:	<u>14</u>	<u>1.6</u>
None of SBA services should be expanded and none added	9	1.0
SBA program is satisfactory in its present form	5	.6
SBA services not broad enough to be of value:	<u>9</u>	<u>1.0</u>
Company too small to benefit from SBA services	4	.4
Technical problems too unique to be resolved by SBA	2	.2
SBA does not assist in problems of foreign trade	1	.1
SBA does not assist in problems of agriculture	1	.1
Problems confined to people and machinery and SBA cannot help	1	.1

Table 19 (continued)

<u>Suggested Improvement</u>	<u>Number</u>	<u>Per Cent</u>
Miscellaneous suggestions:	<u>4</u>	<u>.4</u>
Small business should receive better tax break	2	.2
Postal rates should be lowered	1	.1
Small business should receive more equitable treatment on government contract work	1	.1

These views express a need that was specifically mentioned by many respondents and implied by many others: SBA services should be better publicized. The excerpts above include representative direct statements of this suggestion as well as positive and negative statements which could easily have been conditioned by the fact that the respondents were well acquainted with SBA services, on the one hand, or uninformed (or misinformed) of the services, on the other.

Other than those suggestions that certain of the services listed on the questionnaire form be expanded, no suggestion for improving SBA services approached in frequency of mention the one relating to publicizing the available services more effectively. While 44 respondents specifically mentioned the need for a better understanding by small businessmen of the SBA management and technical assistance program, only 10 respondents concurred in the next most popular individual suggestion--that SBA should be eliminated. In fact, a total of only 24 small manufacturers made suggestions which could be classified under the major heading of "generally opposed to SBA and government assistance programs."

As was expected, many respondents answered the first part of the question (To be of greater service to you, which of these programs do you feel should be expanded...?) by merely listing one or more of the publications or services which were specified in the question regarding familiarity with and use of SBA services. The three services that most respondents indicated that they would like to see expanded were all in the direct assistance area--developing new products, securing government contracts, and research and development. Least support was given to "Starting and Managing" booklets, SBA reference libraries, and management conferences.

A total of 41 respondents suggested that SBA should concentrate assistance services in specific areas. The most frequently mentioned areas were those relating to sales promotion, equity and working capital, interpretation of government regulations, interindustry communications, training employees, customer relations, cost control, and product distribution.

Of those respondents who made specific suggestions for improving SBA services, a significant majority indicated that the services should be better publicized. Other suggested improvements that were offered by more than one small manufacturer included the ideas that SBA should provide technical and management specialists, SBA should provide service for specific industries, SBA publications should be more specific, SBA publications should be less elementary, and SBA size standards should be lowered to exclude big business.

Nine respondents reported that they felt that none of the SBA services should be expanded and none added. The opinion that the SBA program is satisfactory in its present form was expressed by five respondents. Nine small manufacturers felt that SBA services were not broad enough to be of value, and four made miscellaneous suggestions to the effect that small business should receive a better tax break, postal rates should be lowered, and small businesses should receive more equitable treatment on government contract work.

V. INTERPRETATION OF SURVEY RESULTS

Case Study Investigation

One of the primary purposes of the detailed investigation of a number of representative small manufacturers during the course of the research study was to develop information which would be helpful in interpreting the results of the comprehensive questionnaire survey. Although the findings of the survey were, in most instances, clear-cut and decisive, a few questions arose which required further investigation and analysis. These questions were identified in the preceding sections of this report.

The case study analyses served not only to clarify some of the survey findings, but also to confirm many of the survey results. Case study companies were chosen after questionnaire data were analyzed, and a special effort was made to choose firms that were representative of the survey respondents and that were likely to be able to provide helpful information in interpreting survey results. The fact that the case study investigations generally confirmed the findings of the questionnaire survey can be credited to the thoroughness with which survey respondents completed the questionnaire forms and the understanding with which the representative case study companies exposed and discussed their problems and needs.

The interpretations of survey results which follow in this section are based on information gathered during the case study investigations. While some interpretations grew out of a general understanding which developed over the course of the entire case study phase, others are related to the specific experiences of individual companies. In the latter cases, the companies are identified by number and exhibit codes which refer to case study abstracts in Appendix A of this report.

Small Business Problems and Needs

One salient question emerged from the analysis of problems and needs reported by the small manufacturers that participated in the questionnaire survey: Why were manpower problems mentioned by an overwhelming number of respondents while manpower needs were mentioned by relatively few?

An interpretation of this apparent inconsistency of response was sought both in the means used to elicit the response and in the reactions of a sample of those who made the response. As pointed out in a preceding section of this report, the fact that the questionnaire form purposely specified past problems and current needs no doubt accounted for some differences in the replies to the questions of problems and needs. Interviews with case study companies confirmed this assumption. Because of the difficulties encountered in finding, training and keeping qualified employees, some small businessmen recalled these problems very vividly even though they have since managed to develop a stable work force of acceptable employees. This situation was relatively rare, however, and apparently had only a slight effect on the dissimilarity of response to the questions of problems and needs.

The fact that the question of problems called for a free-expression response while the question of needs provided a check-list method of answering was investigated to determine what effect the mechanics of form had on the survey results. One particular possibility was noted: fewer individual areas of need in the manpower field were included on the check list than were individual areas of need in, for example, the manufacturing field or the sales field. While this could have had some effect on the overall classification of needs, it does not explain the lack of correspondence between the individual problems and individual needs reported. As indicated earlier, problems encountered in training personnel were reported more than three times more frequently than were problems of cost control (the area of greatest need) and almost three times more frequently than were problems of sales promotion (the area of second greatest need). It was concluded, therefore, that the method of eliciting responses could not account for all of the differences in the reporting of manpower problems and needs--particularly in view of the fact that the order of frequency with which other problems and needs were reported corresponded reasonably well.

The most significant reason why manpower was reported much less frequently as a need than as a problem was discovered in investigating the reactions of case study firms to the questions of problems and needs. Apparently many respondents felt as some case study companies did: the task of

finding, training, motivating and keeping good employees presented problems which were believed to be insoluble or which, at best, did not lend themselves to solution by outside assistance efforts. Many small businessmen seemed to be resigned to the premise that big businesses attract all of the best employees and that small businesses must learn to live with the leftovers. Regardless of the validity of the premise, this attitude apparently caused many respondents to overlook manpower in indicating the areas of their operations in which managerial or technical assistance would be most helpful.

In view of these considerations, the survey findings should be amended by this qualification: To the extent that outside agencies are able to cope with the manpower problems of small business, the need for assistance in the manpower field is as critical as in any other phase of small business operations and management. Certainly if manpower problems are as pressing as indicated by survey respondents (and as confirmed by case study participants), the need for resolving these problems is equally as important--whether solution is accomplished by the unaided efforts of small businessmen themselves or through the assistance of the Small Business Administration and other interested outside groups.

Closely related to the interpretation of manpower problems and needs was the somewhat unexpected emphasis given by survey respondents to the problem of coping with the apparent lack of job interest demonstrated by many employees. No doubt the inability of many small businesses to attract the best qualified employees contributed to this problem situation. Several respondents expressed the opinion that this problem was even more basic--that many workers today are overly concerned with security and too little concerned with the virtue of hard work. The case study investigations added another interpretation to the small businessman's sensitivity to the problem of employee job interest. There was some indication that this problem was not peculiar to small business but that small business owners and operators were more aware of the problem because they were closer to it and reacted more strongly to it because it conflicted so acutely with their basic philosophy of entrepreneurship. Regardless of interpretation, however, the fact remains that employee motivation is a critical need of small business, whether accomplished through general education or through the

individual efforts of small business operators.

In the analysis by industry of the problems and needs reported by small manufacturers, it was found that problems of purchasing were mentioned by an unusually large number of respondents in the lumber and wood products industry, that the most frequently reported individual problem in this industry was concerned with the availability of raw materials, and that a majority of responding firms in this industry indicated that their greatest need was for assistance in matters relating to raw materials supply. Since timber is one of the State's most abundant natural resources, this response was somewhat surprising, and an interpretation was sought during the case study investigations. It was found, particularly through information supplied by Company #13 (Exhibit M), that the problem was basically one of competition. Large pulp and paper mills and other major consumers of timber apparently have bought up most of the available timber stands, and small wood-using industries are faced with the dilemma of decreasing outside sources of supply and increasing prices of timberland if they choose to develop their own supply of raw wood. Although this problem is somewhat regional in nature, it exemplifies the more widespread plight of small businessmen in other industries who must compete with large companies for raw materials in a bid-and-ask market.

Another result of the analysis of problems by industry posed a question that could not be answered from the survey data. The most frequently reported problem of firms in the chemicals industry was that of general competitive practices--even though external problems of competition were specifically excluded by the questionnaire instructions. When it was discovered that a majority of the responding firms in the chemicals industry were manufacturers of agricultural fertilizers, a company of this type was included in the group to be studied in more detail. The key to the problem of competition was supplied by the officers of Company #12 (Exhibit L). Apparently it is virtually impossible for a small independent manufacturer of agricultural fertilizers to meet the price competition of cooperatives in this field since the tax advantages enjoyed by cooperatives make it possible for such groups to push prices to very low levels. In addition, the tax situation makes it possible for cooperative profits to be reinvested in machinery and equipment with additional advantages in cost savings. For the independent manufacturer, it is difficult to manage the same degree of reinvestment

after taxes. This problem, like that in the wood industry, has much broader application than just in this one segment of the chemicals industry where it was pinpointed by the survey results.

The two areas of greatest need for managerial or technical assistance were reported by survey respondents to be cost control and sales promotion. From the responses received it was not possible to determine if small manufacturers were more concerned with the general prospect of paying less for what they bought and selling more of what they made or with the specific need for identifying and controlling costs and developing effective means of promoting the demand for and distribution of their products. If the case study companies are accepted as representative, the latter alternative is certainly the case. Almost without exception, the small manufacturers contacted during the case study phase of the project expressed a sincere desire for assistance in developing specific means of controlling costs and promoting sales. The survey emphasis on the need for assistance in cost control and sales promotion can be interpreted, therefore, as a genuine expression of critical areas in which outside assistance would be most helpful to small businesses.

Use and Evaluation of SBA Services

Three clearly defined and significant conclusions developed from the questionnaire survey of small manufacturers' reactions to the SBA management and technical assistance program:

1. Small businessmen are generally unfamiliar with SBA management and technical assistance services.
2. Relatively few small businessmen have made use of these services.
3. SBA services should be better publicized.

Other reactions--particularly those relating to the evaluation of SBA services--were not conclusive because of the limited number of respondents who were sufficiently familiar with the services to offer objective judgments.

In attempting to interpret these findings, considerable time was spent with the owners and officers of case study companies in discussing the appropriate role of the Small Business Administration in assisting small businessmen with problems of internal operations and management. These case study

investigations not only confirmed the conclusive findings of the general survey, but also added much to an understanding of the reactions of small businessmen to outside assistance programs.

Some of the more thoughtful opinions of case study participants are outlined below. Although these opinions do not carry the weight of numbers, they are nevertheless worthy of serious consideration. Whereas written responses to the questionnaire might have reflected first impulsive thoughts, the suggestions which follow were developed through guided interviews and detailed discussions and represent the considered convictions of experienced owners and operators of the case study companies.

Education

1. SBA should concentrate in the field of small business management education. This should include management conferences, management development courses, supervisory training courses, and educational aids (such as training films) which could be used on a loan basis by individual small businessmen in their own plants. (Company #5 - Exhibit E) (Company #18 - Exhibit R)

2. Management conferences and management development courses should be offered at the local level wherever possible--at least in areas where small businesses are concentrated. (Company #4 - Exhibit D) (Company #6 - Exhibit F)

3. SBA should provide specialized training courses, if necessary by correspondence, designed to meet the specific needs of individual industries. (Company #1 - Exhibit A) (Company #8 - Exhibit H)

Information

1. SBA should let it be known through contact with small businessmen what services are available and how they can best be used. (Company #1 - Exhibit A) (Company #7 - Exhibit G)

2. SBA should provide news of recent developments in labor-management relations in small businesses. (Company #3 - Exhibit C)

3. SBA could serve a useful function as a clearinghouse for information of interest to individual industries. This could be done by developing a digest and reference system and by issuing bulletins periodically by industry or area of interest so that each small businessman could identify quickly those sources of information which are of particular interest and value to him. (Company #14 - Exhibit N)

4. SBA could serve small businesses by assisting new companies in setting up and maintaining records and reports required by government agencies. Specifically, SBA could develop a handbook which would list and explain all forms and regulations relating to the establishment and operation of a small business. This would eliminate the necessity of hiring outside accounting and legal assistance at the time when the new business needs to conserve capital. (Company #17 - Exhibit Q)

Management Counseling

1. The SBA management counseling service should be expanded and should be made more readily available to small businesses. (Company #1 - Exhibit A) (Company #3 - Exhibit C) (Company #5 - Exhibit E)

2. SBA counseling specialists should be available to small businesses for a sufficient length of time to completely analyze and make recommendations on major problems. (Company #15 - Exhibit O)

Other Suggestions

1. SBA could serve the needs of small business more effectively if publications were more specific in nature and if requests for information and service could be handled more directly and expeditiously. (Company #10 - Exhibit J) (Company #14 - Exhibit N)

2. SBA should demonstrate greater care in helping small business by making sure that its funds or services are not wasted. (Company #12 - Exhibit L)

The president of Company #16 (Exhibit P) offered several thoughtful suggestions which deserve mention in examining the appropriate role of the Small Business Administration. These were excluded from the summary above so that they could be considered together as the recommendations of a

successful small businessman who is familiar with SBA services and who has given careful consideration to the question of how SBA can be of greatest practical service to small business. The president of this case study company suggested the following:

1. SBA should enlarge its general management education program through extension courses, more management conferences, etc. These should be done at the local level where possible to permit management personnel to benefit from the courses without being away from their jobs for extended periods of time.

2. Although technical assistance is desirable, it is not feasible as an SBA service. Technical problems are too varied, and it is recognized that SBA has practical limitations on its staff services. SBA services should be those which meet the most common needs of small businessmen.

3. Rather than participating directly in loans to small business, SBA's contribution would be more meaningful if it concentrated on providing information and advice on the advantages and disadvantages of various types of financing and on methods of pursuing each type.

4. The greatest contribution SBA could make would be to help small business help itself--not by doing the work for small business, but by contributing to the creation of an environment in which small companies can grow and prosper. In this regard, SBA should reemphasize its role as liaison between small business and government--in protecting the rights of small business, interpreting regulations, policing set-asides on government contracts, and interpreting the practical needs of small businessmen in regard to proposed legislation.

VI. UNDERLYING CAUSES OF PROBLEMS OF SMALL MANUFACTURING MANAGEMENT

Fundamental Problems of Case Study Companies

Participants in the questionnaire survey expressed very clearly the fact that their most pressing problems of internal operations and management were those related to recruiting and training employees, promoting sales, and controlling costs. An analysis of the experiences of case study companies left little doubt that these problems were real and in critical need of solution. This analysis revealed something much more basic, however. While these problems are widespread, they are not universal; while they harass many small business managers, they are not inherent in small business management; in short, they do not "just happen"--they grow out of the failure to avoid or resolve certain more fundamental problems of small business organization and management.

A consideration of the underlying causes of the reported problems of small manufacturing management developed as a by-product of the investigation of the problems, needs and reactions of the companies chosen for case study analysis. After carefully examining the origin, development and accomplishments of each company, it became evident that the most successful companies followed a common pattern--each had observed certain basic principles of organization and management which, while not making the company "problem proof," had prevented the development of many problems which are sometimes thought to be synonymous with small business. Conversely, the least successful of the companies studied were found to be those whose surface problems were symptomatic of an earlier failure to observe one or more of the basic principles of small business organization and management.

The discussion of the underlying causes of the problems of small manufacturing management which follows in this section is based solely on the principles derived in the analysis of case study companies and does not, therefore, claim to be an exhaustive dissertation on management philosophy. Because of the diversified make-up of the case study sample, however, the experiences investigated were broad enough to exemplify many of the principles which are of greatest practical value to small business operators.

To avoid the negative approach, the underlying causes of problems of small manufacturing management are stated below in terms of positive principles of small business organization and management. It is implied, of course, that fundamental problems result from the failure to apply these principles in organizing, developing, and managing a small business enterprise.

Principles of Small Business Organization and Management

Competitive Field: A small manufacturer should limit his field of competition to that in which he is capable of competing successfully.

Competition may be limited in a number of ways. Perhaps the most successful approach is for the small manufacturer to offer products or services which appeal to a special segment of a general market and to take advantage of his size by providing personalized service and close customer relations. Generally, large manufacturers are not interested in small, specialized markets and are not in a position to provide the same degree of personal service as a small business.

Company #2 (Exhibit B) has developed a line of highly specialized products which allows it to compete successfully in a field that is dominated by large firms. Company #5 (Exhibit E) avoided the fate of many small companies in a highly traditional industry by recognizing that its existence depended upon providing for unique, not general, consumer needs. Faced with strong price competition from cooperatives, Company #12 (Exhibit L) has found that it can compete effectively on the basis of good service policies. In one of the most highly competitive industries in the State, Company #13 (Exhibit M) has developed a specialized market for its high quality, special-cut lumber products. Company #18 (Exhibit R), through special processing of a standard product and a sales approach based on service and close customer relations, has managed to thrive in competition with approximately 60 similar firms in the same small town.

Careful planning and continuous reevaluation must accompany the selection of a competitive field. The mere fact that a company produces a unique product or provides a specialized service does not assure its long-term success. Company #17 (Exhibit Q), for example, offers a unique

processing service--but the demand for this service is so spasmodic that the company faces an uncertain future. Company #7 (Exhibit G) offers a specialized product in a highly traditional industry and Company #9 (Exhibit I) produces a high quality product in a market where quality no longer has the appeal that it once had. Although these companies have been successful in the past, both may need to diversify in the future to broaden the markets for their product. Company #10 (Exhibit J) has limited its field of competition by developing and producing a distinctly unique product. While this is an ideal way for a small business to compete, continued success can be assured only if the product is aggressively promoted before other manufacturers make a serious bid for the market.

Under most circumstances, it is disastrous for a small manufacturer to attempt to compete for a general market that is dominated by big businesses. Many of the problems of Company #11 (Exhibit K), Company #14 (Exhibit N), and Company #20 (Exhibit T) can be attributed to the difficulties involved in the struggle against an almost unlimited competitive field.

It should not be concluded, however, that it is impossible for a small manufacturer to compete effectively in a general competitive field. This is not in violation of the principle stated above. If a small manufacturer succeeds in a general market, he has, in effect, "limited" his field of competition to that in which he is capable of competing successfully.

Each of the case study companies which has succeeded in a general market is characterized by sound organization, skillful management, and an aggressive spirit. Each has grown from small-scale to substantial operations, and it is likely that each will continue to grow out of the "small business" category. Company #6 (Exhibit F) has shown a willingness to search out new opportunities rather than to wait for new ones to develop. Company #15 (Exhibit O) has capitalized on the growth of a relatively new industry by astutely timing its initial venture, by carefully planning each step in its development, and by aggressively seeking out and applying new methods and approaches. The management of Company #16 (Exhibit P) has demonstrated exceptional skill in planning and administering the company's operations and has developed an imaginative and aggressive marketing approach.

Knowledge and Skill: An operator of a small manufacturing firm should possess or acquire a high degree of management skill and an intimate knowledge of the manufacturing field in which he operates.

Many small businessmen make the mistake of entering a field that appears to be lucrative rather than one in which they have knowledge and experience. Although managerial ability may overcome some of the disadvantages of a limited knowledge of a manufacturing field, it does not remove entirely the handicap of having to compete and deal with others who have an expert knowledge of the field. For example, the owner of Company #10 (Exhibit J) recognizes that many of the problems that he faced during the first few years of operation resulted from his lack of familiarity with the operation and management of a manufacturing enterprise of the type that he owned.

It should be noted that the principle above states that a small manufacturer should possess or acquire knowledge and skill. The small manufacturer may increase his own knowledge and skill through education and experience. He may also acquire knowledge and skill by hiring qualified assistants or by taking advantage of specialized outside assistance on a temporary basis as particular problems or needs arise. The failure to use or the misuse of hired knowledge and skill is one of the most serious deterrents to the growth of many small business operations.

Perhaps the prime example of the advantage of acquiring personal knowledge of a specialized field is the experience of the founder of Company #2 (Exhibit B). Although he already had some knowledge and experience in the industry, the principal of this company followed a carefully planned program of self-education before he ventured into a manufacturing operation of his own. The success of the company can be largely attributed to the purposely acquired basic knowledge which the founder possessed when he organized his company.

Without exception, the operators of the most successful case study companies recognize the necessity for acquiring specialized knowledge and skill. In addition to developing his own knowledge, the president of the company cited in the preceding paragraph has hired well qualified technical assistants and is concerned because he feels that he is not using the brainpower of his staff as effectively as possible. Company #6 (Exhibit F) has

broadened its reserve of knowledge and skill by encouraging the participation of middle management and by hiring a specialist to consolidate, through organization, the operational gains of the company. The founder of Company #16 (Exhibit P) supplemented his limited knowledge of the industry he entered by using part-time engineering assistance at first and by later adding a full-time engineering staff. It was through the wise use of his own staff and of outside assistance that the firm developed a product line that makes it possible for his company to compete successfully with larger manufacturers in a broad market.

The principle that a small businessman should possess or acquire knowledge and skill does not apply only to "large" small businesses. In fact, the need is just as critical and probably more often neglected in the smaller companies. Too many small operators do not recognize the need for self-improvement or are "too busy" with routine operations to take advantage of opportunities for assistance when they arise. Others either distrust or feel that they can not afford outside help. Although the president of Company #18 (Exhibit R) has a thorough knowledge of his industry, he recognizes his limitations in certain phases of organization and management. The success of his small company (15 employees) has resulted in part from the fact that he has demonstrated a remarkable openmindedness in taking advantage of opportunities to improve himself and his business operations through self-education and a wise use of outside assistance.

Organization and Delegation: The principal of a small manufacturing firm should plan for the organizational needs of his company and take full advantage of the abilities of his subordinates.

This principle is somewhat related to the preceding one and is perhaps violated even more often. Regardless of the degree of knowledge and skill that a small business operator possesses, the time soon comes--if his business develops normally--when operational and managerial requirements exceed his span of knowledge and skill. The small businessman must not only plan for this eventuality, but he must also be willing to delegate responsibility and corresponding authority to others as the organization grows.

Obviously, the principal of a very small business must do much of the work himself. This habit is often difficult to break when the company grows larger, however, and many small businessmen continue to attempt to

make all of the decisions and do most of the work even after the company has grown to a size where it is neither physically nor economically feasible for him to do so. Unless a small business owner grows into a small business manager, in the strictest sense of the term, problems in all areas of the operation are likely to develop and multiply.

At least two of the case study companies are faced with problems which are aggravated by the fact that the principals attempt to do too much of the work themselves and are reluctant to delegate authority to subordinates (see Exhibits D and K). To avoid future problems, Company #5 (Exhibit E), Company #7 (Exhibit G), and Company #12 (Exhibit L) must plan to develop a reserve of management talent to round out the future organizational needs of the companies. The president of Company #1 (Exhibit A) has recognized the need for increasing his span of knowledge and is planning to employ a young management trainee to assume some of the administrative load. Company #3 (Exhibit C) has recently added a management trainee to help spread management authority.

Substantiation of the validity of the principle of organizational planning and delegation of authority is found in the experiences of some of the most successful companies investigated during the case study phase of the project. The presidents of Company #2 (Exhibit B) and Company #16 (Exhibit P) delegate authority to carefully selected subordinates and thus free themselves to concentrate on the difficult task of managing the organizations and performing those functions for which they are best suited. These small businessmen added a further refinement to the practice of delegation: both conduct periodic staff meetings, encourage a free interchange of ideas, and allow responsible subordinates to share in planning the policies and practices of the companies. Careful planning of the organizational needs of Company #19 (Exhibit S) has contributed significantly to the success of the operation. Even in a very small company (Company #18 - Exhibit R), the president has found that it is a good business practice to delegate authority and to take full advantage of the abilities of his subordinates.

Manpower Resources: A small manufacturer should recognize the fact that manpower resources are no less valuable because a business is small.

This principle and its ramifications are so basic that they are often taken for granted; yet, judging from the results of this study, they are perhaps more often violated than any other principle of small business management. Although small business managers pay competitive prices for raw materials, supplies, equipment, and other resources, many somehow expect to attract qualified manpower at cut-rate prices because they are "small and cannot afford to pay more." As a result, they often find themselves in the position of Company #11 (Exhibit K): in an effort to get cheap labor, management succeeds only in getting the most expensive kind--the untrained, unreliable worker whose aptitudes are limited.

It is true, of course, that small businesses are at a disadvantage in the general labor market. For reasons which are beyond the scope of this study (but which are worthy of an independent study), many in the labor force prefer the security of a large company to the challenge of a small one, regardless of the immediate salary offering. When a small business offers neither a challenge nor a reasonable salary, this disadvantage becomes even greater. Fortunately, some small businessmen have found that they can decrease the effects of this disadvantage by paying competitively, offering attractive working conditions, and allowing employees to share in the growth of the company. Rather than feeling that they can not afford these refinements, these small businessmen think in terms of the savings available in reduced absenteeism and turnover, shorter training periods, better productivity, and the other cost-saving advantages of a well qualified and stable work force.

The president of Company #2 (Exhibit B) has found that it is well worth the time and expense involved in locating and selecting employees who are uniquely suited for his company. He is willing to seek out and pay for men who have an intense desire to succeed, who want to build a career in a young company, and who take pride in personal accomplishment. He feels that individuals must be screened carefully to avoid those persons who are not flexible enough to meet the demands of a small organization. As a result of this recognition of the value of carefully selected manpower resources, the company has avoided many of the personnel problems that often plague small business.

Another of the more successful case study companies (Company #16 - Exhibit P) not only pays competitively to attract good personnel, but also provides attractive working conditions and benefits to help maintain a stable work force. Further evidence of this company's regard for manpower resources are the excellent facilities which have been developed for employee communications. Policies and procedures are published and distributed, staff meetings facilitate the exchange of information, and employees are well informed of company operations and plans through bulletin board notices and a company newspaper.

Company #18 (Exhibit R) illustrates the conclusion that even very small companies can not afford not to recognize the value of paying for good manpower resources. This company voluntarily provides wages and benefits which exceed those demanded by the industry union. Office employees participate in a profit-sharing retirement plan and are eligible for medical benefits; plant employees receive an annual bonus; a group insurance plan covers all employees; the plant foreman receives a monthly bonus based on production and payroll; and a special effort is made to assure employee comfort in an industry that is known for its unpleasant working conditions. Rather than viewing these efforts as expensive frills, the president of the company accepts them as good business practices and sound investments in the future of his company.

Accounting and Control Records: A small business operator should maintain complete and accurate records and base his operating decisions on known facts.

The first part of this principle causes some difficulties with small businessmen because of the dangers that lie at each extreme. At what is apparently the most popular extreme, there are those small business operators who feel that because a business is small there is little need for records other than those required to satisfy tax and other government regulations. They are interested primarily in knowing whether the company is operating at a profit or a loss, and they depend on their infallible memories and keen powers of observation to keep informed of operating results. At the other extreme are those small business managers who, in an honest effort to develop complete and accurate records, succeed only in enmeshing the business in an entanglement of records, reports, systems, and procedures which are impressive in their complexity but which defy interpretation.

Needless to say, the principle above refers to neither of these extremes but to the optimum use of accounting and operating records. Records must be complete in the sense that they not only provide all of the information required in preparing reports and statements, but also serve as a sound basis for making decisions regarding the effective control of capital, production processes, manpower, purchasing, sales, and other phases of the company's operation. Simplicity of administration should also be considered in developing the most useful record-keeping systems for a small business. While very simple records generally suffice for very small businesses, the need for more effective controls and more detailed operational information multiplies as a business grows and operations become more complex. The failure to expand and refine recorded information of a company's operations as the company increases in size and complexity adds to the growing pains of a small business, as is attested to by the unusually large number of survey respondents who specified that cost control was the area in which outside assistance would be most helpful.

There should be little argument with the principle that operating decisions should be based on known facts. Unfortunately, however, small business decisions are often based on the experience or "intuition" of one man rather than on recorded facts regarding the company's operations. As a result, some small businessmen fail without ever really knowing the reason why. Only through the development and maintenance of adequate and proper records can a small business manager know and retain the facts necessary to make sound and effective operating decisions.

Some of the most serious problems of several case study companies can be traced directly to the need for more adequate accounting and cost control records. More impressive, however, are those case study firms that have developed operational records which are well suited for their needs. These include, among others, Company #2 (Exhibit B), Company #7 (Exhibit G), Company #8 (Exhibit H), Company #13 (Exhibit M), Company #15 (Exhibit O), and Company #16 (Exhibit P). Company #6 (Exhibit F) has expanded its record-keeping systems to meet its growth needs and has now found it feasible to install automatic equipment for processing and analyzing operational data more efficiently. Company #10 (Exhibit J) has developed a very simple but adequate cost accounting system, and Company #12 (Exhibit L) has effectively combined simplicity and completeness in its accounting controls.

The managers of two case study companies of widely differing sizes concur in their belief that the cost involved in developing and maintaining complete and accurate records is insignificant in comparison with the benefits derived from knowing the facts. The owner of Company #18 (Exhibit R), a small operation employing approximately 15 employees, believes that having too few records poses a greater problem for a small businessman than having too many. The manager of Company #19 (Exhibit S), a substantial operation of more than 200 employees, has expressed and demonstrated that he is willing to pay whatever is necessary to assure that accounting and control records are adequate and that reliable facts are available when operating decisions must be made.

Flexibility and Adaptability: A small manufacturer should take advantage of the flexibility that his size affords by applying an aggressive ingenuity in overcoming problems and meeting changing needs.

One of the greatest advantages that a small business enjoys over a large business is the possibility of adapting more quickly to changing situations. Less rigidly bound by policy and structure, small businesses generally are capable of moving more directly and swiftly in meeting problems and needs. This natural advantage is often lost, however, because the small business operator either is unwilling or unable to adapt or lacks or does not exercise the aggressiveness and ingenuity required to capitalize on the asset of flexibility.

Actually, this principle underlies all of the other principles of small business organization and management. The selection of a competitive field by developing a unique product or service requires considerable initiative and ingenuity, and continued success in either a limited or general competitive field can be assured only through adapting to changing conditions and following an aggressive sales program. Flexibility, adaptability, ingenuity, and aggressiveness are all important traits in developing and applying knowledge and skill, in planning and utilizing effective organizational relationships, in overcoming the problems that a small businessman must face in the manpower market, and in developing accounting and control records which are uniquely suited for specific types of operations.

Illustrations of how case study companies have overcome problems by aggressive and ingenious action have been cited in connection with the preceding principles. Other examples also deserve mention. Much of the success of Company #8 (Exhibit H) has resulted from management's willingness to try new ideas, recognizing that the products and production system had to be up to date if competition was to be met. The management of Company #12 (Exhibit L) has demonstrated through the introduction of manufacturing innovations an awareness of the need for change in an industry where policies and practices have strong roots in the past. The president of Company #13 (Exhibit M) has shown a great deal of ingenuity in laying out his plant, in his adaptation of equipment for multiple purposes, and in the installation of labor-saving devices. In a relatively new industry, the management of Company #15 (Exhibit O) has kept pace with larger manufacturers by aggressively seeking out and applying new methods. Despite other problems, the owner of Company #17 (Exhibit Q) has developed ingenious innovations to increase the efficiency of production equipment, to decrease maintenance costs, and to provide effective safety devices.

Although all of the most successful case study companies do not strictly observe all of the stated principles of small business organization and management, they all meet on common ground in the observance of this final principle. The five case study companies which were judged to be the best managed and the most successful all take advantage of the flexibility that their size affords, are willing to adapt to changing needs and circumstances, and are characterized by aggressiveness and ingenuity in their approach to the solution of problems.

VII. CONCLUSIONS

Bases for Conclusions

The conclusions which follow in this section are based upon the reported experiences, opinions and reactions of the 757 operators of small manufacturing firms who participated in the questionnaire survey of small business problems and needs. Confirmation, interpretation, and expansion of these conclusions were made possible by the detailed investigation and analysis of the operations and experiences of 20 of the small manufacturing companies.

Although these conclusions are stated or implied throughout the body of this report, they are summarized here for convenience in considering the answers to three of the four basic questions which motivated this study: What types of operational and managerial problems are most critical to small businesses? What specific needs arise from these problems? How well are these needs presently being met?

A note of explanation should precede a consideration of the conclusions regarding problems and needs. Although small business problems and small business needs are interrelated, many of the small manufacturers that participated in this study differentiated between the two and, as a result, the reported problems and needs did not correspond closely. The following factors should be considered in interpreting these differences:

1. By definition, the problems reported as having been encountered in developing and managing small businesses included both past and present problems; the needs for assistance were related to current problems and possibly to anticipated future problems.

2. Some problems apparently were believed by respondents to be insoluble or were considered to be types that did not lend themselves to solution through outside assistance; these problems, therefore, did not carry over into the need area.

The differences in conclusions regarding problems and needs should not, therefore, be viewed as questionable inconsistencies. Rather, the differences in conclusions relating to needs should be considered as complementary

to those relating to problems in that they add to an understanding of the most pressing current and anticipated problems and give emphasis to those areas in which small businessmen feel they could best use outside assistance.

The conclusions regarding the use and evaluation of SBA services are based entirely on responses received from those small manufacturers that participated in the questionnaire survey. Conclusions of the project staff which differ from the survey findings are reserved for the "Recommendations" section of this report. One point should be kept in mind in considering the conclusions regarding the use and evaluation of SBA services: Some survey results--particularly those relating to the evaluation of SBA services--are open to question because of the limited number of respondents who were sufficiently familiar with the services to offer objective judgments.

Problems Encountered in Developing and Managing Small Businesses

The most serious problems that small businessmen face in developing and managing manufacturing enterprises are related to the attraction, development, motivation, and utilization of manpower resources.

The general areas of small business management in which problems are most often encountered are the following (in order of frequency):

1. Manpower
2. Manufacturing
3. Sales
4. General management
5. Financial management
6. Purchasing
7. Inventory control

Problems involved in recruiting and training well qualified employees cause small manufacturers more concern than any other specific types of problems.

The following are the most critical individual problems of internal operations and management, ranked in order of seriousness:

1. Recruitment of non-management personnel
2. Training of non-management personnel
3. Training of management personnel
4. Sales promotion
5. Recruitment of management personnel
6. Development of distribution channels
7. Cost control

8. Employee job interest
9. Product diversification
10. Quality control
11. Manufacturing methods
12. Research and development
13. General management problems
14. Labor turnover
15. Planning and scheduling production
16. Technical engineering assistance
17. Wage rates
18. Production space
19. Collection of accounts receivable
20. Organization structure
21. Seasonal sales
22. Pricing policies
23. Labor productivity
24. Maintenance of equipment
25. Inventory control

Problems of small manufacturers vary relatively little from industry to industry, and manpower problems predominate in practically all industries.

Regardless of the number of workers employed, manpower problems are encountered more frequently than any other general type of problem, and these problems grow in complexity as a company increases in size.

Age, type of legal organization, and union status have little effect on the general types of problems of internal operations and management that a small manufacturing company encounters in its development. Manpower problems predominate in companies of all ages, in proprietorships, partnerships and corporations, and in union and non-union organizations.

Small Business Needs for Managerial and Technical Assistance

The individual areas of operation in which managerial and technical assistance would be most helpful to small manufacturers are cost control and sales promotion.

The following are the individual areas of greatest need for outside assistance services, ranked in order of intensity of need:

1. Cost control
2. Sales promotion
3. Training employees
4. Production methods
5. Maintaining stable work force
6. Diversification
7. Quality control

8. Research and development
9. Raw materials supply
10. Recruiting personnel
11. Maintenance of equipment
12. Distribution channels
13. Organizational planning
14. Inventory control
15. Production scheduling
16. Market information
17. Customer relations
18. Accounting methods
19. Figuring contract bids
20. Employee relations
21. Legal assistance
22. Meeting contract specifications

The manufacturing function is the major area of a small manufacturing operation in which managerial or technical assistance would be most helpful.

The major areas of operation in which outside assistance is most needed by small manufacturers are the following (in order of greatest need):

1. Manufacturing
2. Sales
3. Manpower
4. Financial management
5. General management
6. Purchasing
7. Inventory control

To the extent that outside agencies are able to cope with the manpower problems of small business, it is concluded that the need for assistance in the manpower field is as critical as in any other phase of small business operations and management.

The primary needs of small manufacturers vary widely from industry to industry; however, the need for assistance in the sales area predominates in more industries than does the need in any other major area.

Very small manufacturing firms feel an acute need for assistance in resolving sales problems; large firms are more concerned with the need for technical assistance in manufacturing operations.

Although needs differ according to age and type of organization, there is no evidence to conclude that there is any significant relationship between age of organization or type of legal structure and the types of needs that confront small manufacturing companies.

Based on limited evidence, it is concluded that manpower needs are more critical to union firms than to non-union firms. However, evidence does not indicate that manpower needs are directly related to the fact that the employees of a small manufacturing firm are represented by a union.

Underlying Causes of Problems of Small Business Management

Without deemphasizing the critical nature of the existing internal problems and needs of small manufacturing firms, it is firmly concluded that many of these problems and needs have resulted from a failure to observe certain basic principles of small business organization and management. It is concluded that the fundamental problems of small manufacturers are these:

1. The small manufacturer fails to limit his field of competition to that in which he is capable of competing successfully. He attempts to compete in a field that is dominated by larger businesses without offering unique or special products or services, without taking advantage of his size by providing personalized service and close customer relations, or without having the resources and resourcefulness to grow with an industry and compete for a general market on equal terms with larger companies.

2. The operator of a small manufacturing firm does not possess or fails to acquire a high degree of management skill and an intimate knowledge of the manufacturing field in which he operates. He may enter a field that appears to be lucrative rather than one in which he has knowledge and experience. If he is familiar with the field in which he operates, he may fail to recognize the need for self-improvement and growth in knowledge and skill. He may fail to take proper advantage of the knowledge and skill that can be acquired by hiring qualified assistants or by utilizing outside assistance as particular problems or needs arise.

3. The principal of a small manufacturing firm fails to plan for the organizational needs of his company and fails to take full advantage of the abilities of his subordinates. He does not plan for the day when operational and management requirements of his company will exceed his span of knowledge and skill. He is reluctant to delegate authority, and

he attempts to make all of the decisions and do most of the work himself even after his company has grown to a size where it is neither physically nor economically feasible for him to do so.

4. The small manufacturer fails to recognize the fact that manpower resources are no less valuable because a business is small. Although he pays competitive prices for raw materials, supplies, equipment, and other resources, he somehow expects to attract qualified manpower at cut-rate prices because he is "small and cannot afford to pay more." In an effort to get cheap labor, he succeeds only in getting the most expensive kind--the untrained, unreliable worker whose aptitudes are limited.

5. The small business operator fails to maintain complete and accurate records and therefore fails to base his operating decisions on known facts. He may rely on his memory or observation to keep informed of operating results, or his records may be too incomplete or too complex to be useful. He fails to recognize the fact that only through the development and maintenance of adequate and proper records can he know and retain the facts necessary to make sound and effective operating decisions.

6. The small manufacturer fails to take advantage of the flexibility that his size affords, and he does not apply an aggressive ingenuity in overcoming problems and meeting changing needs. He either is unwilling or unable to adapt or lacks or does not exercise the aggressiveness and ingenuity required to capitalize on the asset of flexibility.

Use and Evaluation of SBA Services

Small manufacturers are generally unfamiliar with the management and technical assistance services which are available to them through the Small Business Administration.

Small manufacturers are most familiar with the assistance available in securing government contracts and with the publications "Management Aids for Small Manufacturers" and "Small Business Bulletins."

Small manufacturers are least familiar with SBA management counseling services, SBA reference libraries, and research and development assistance.

Relatively few small manufacturers use the publications and services available through the SBA management and technical assistance program.

The publications and services which are most widely used by the small manufacturers that participated in this study are "Management Aids for Small Manufacturers," "Small Business Bulletins," government contract assistance, and booklets in the "Small Business Management" series.

The services which are used least by the small manufacturers that participated in this study are SBA management counseling services, SBA reference libraries, research and development assistance, and management development courses.

Most small manufacturers who reported that they had used the services of the SBA management and technical assistance program find these services to be of little value to them in solving their particular problems of internal operations and management.

Small manufacturers find the most helpful publications and services to be personal counsel and advice on management and technical problems, management conferences and management development courses, government contract assistance, "Management Aids for Small Manufacturers," and booklets in the "Small Business Management" series.

Small manufacturers find the least helpful services to be SBA reference libraries, assistance in new product development, and assistance in research and development.

To be of greater value to small manufacturers, the publications and services of the SBA management and technical assistance program should be better publicized.

Present SBA services should be expanded, particularly in the areas of assistance in developing new products, securing government contracts, and research and development.

VIII. RECOMMENDATIONS

Bases for Recommendations

The recommendations which follow in this section are directed to the answer to the last and most significant of the four questions which motivated this research study into the problems and needs of small manufacturers: What can be done to meet the needs of small business more effectively?

The answers to this question were provided primarily by the small manufacturers that participated in the questionnaire survey and by the officers and operators of those small businesses that were selected for case study analysis. For two reasons, however, these answers could not be accepted entirely without reservation. First, so few of the respondents had used the services of the SBA management and technical assistance program that it was necessary to question whether or not their evaluation of these services and their suggestions for improvement were reasonably representative. Second, each respondent was asked how SBA could be of greater service to him as an individual small businessman; as a result, not all answers took into consideration whether or not it was feasible to provide the same service on a broad scale for all eligible small businessmen.

In view of these considerations, therefore, the recommendations in this section reflect some of the interpretations of the project staff. These interpretations are not arbitrary but are based on a careful consideration of the practicality and feasibility of recommended assistance services after analyzing and reviewing the survey data and after conducting probing discussions with small manufacturers regarding the appropriate role of the Small Business Administration in resolving small business problems and needs. Since these interpretations are based on the experiences and opinions of small businessmen, it should be emphasized again that the recommendations which follow are essentially those of the small manufacturers that participated in this study.

These recommendations are based on the assumption that management and technical assistance for small business is a legitimate function for a government agency to assume; they do not, therefore, question the theory or philosophy of government assistance for small business. Although several survey respondents raised this question, the response was not great enough to warrant any conclusions or recommendations regarding it. This study, therefore, recognizes the existence of the SBA management and technical assistance program, assumes the validity of the function, and seeks only to recommend how this program can be made more practical and useful to small businessmen.

Communication of Availability and Use of SBA Services

It is recommended that the Small Business Administration make a concentrated effort to inform all small businessmen of what management and technical assistance services are available and how these services may be used most effectively.

Perhaps the most indisputable conclusion that was reached in this research study was that small businessmen generally are not familiar with the management and technical assistance services that are available to them through the Small Business Administration. Only 30 of the 757 small manufacturers that participated in the questionnaire survey indicated that they were familiar with all of the publications and services listed. In addition, the one suggestion for improving SBA services that was mentioned most often by survey respondents was that SBA services should be better publicized.

Obviously, management and technical assistance services, regardless of their value and potential, can not meet the needs of small business unless small businessmen are aware of the fact that such services are available. To improve these services, therefore, would have little meaning unless they are first made known. For this reason, the recommendation that the availability of assistance services be more effectively communicated to small businessmen is given precedence over all others.

The fact that assistance services are not better known can not be blamed entirely on those offering the services. No doubt there are many practical problems involved in reaching the millions of small businessmen

throughout the country. In addition, as was encountered in this study, there are many small business operators who do not seek and sometimes vigorously reject any offers of outside assistance, regardless of its potential value and particularly if it is associated with a public agency. The fact that this attitude exists complicates the job of communications. It also serves to emphasize the need for injecting the public relations concept into the requirement for better informing small businessmen of available services.

A majority of the limited number of survey respondents who had used SBA services indicated that they had found them to be of little or no value. If this reaction is representative, it can be concluded either that the services are not as useful as they should be or that small businessmen do not know how to use the services most effectively. If the latter is true, a real need exists for indoctrinating small businessmen in the use of SBA services.

In summary, this recommendation is based on the conclusion that, regardless of any other consideration, the SBA management and technical assistance program can not make its optimum contribution to small business unless as many small businessmen as possible are fully informed of what assistance services are available, how these services may be secured, why they are likely to be beneficial, and how they can be used most effectively.

Emphasis and Direction of SBA Services

It is recommended that the emphasis of SBA management and technical assistance services be directed toward the practical solution of the most critical problems and needs of small business.

This recommendation is not intended to imply a critical evaluation of the emphasis and direction of present SBA management and technical assistance services. Certainly the survey findings regarding the evaluation of SBA services were not conclusive enough to warrant such an implication. Rather, this recommendation is based on the premise that assistance efforts should be directed toward what have been objectively found instead of what are merely thought to be the most pertinent problems of small business.

One of the primary objectives of this research study was to identify what small businessmen themselves feel are their basic problem areas. To the extent that actual problems are identified, the Small Business Administration and other interested agencies can take a more objective approach in directing their efforts toward the known needs of small business. The results of this and similar studies, therefore, should provide the basis for determining the emphasis and direction that assistance efforts should take in providing a more practical service for small business.

While this study was purposely restricted to small manufacturers in a limited geographic area, some of the reported problems and needs were sufficiently basic and widespread to indicate that they were universal in nature. Based on the results of this study--and subject to the concurrence and contribution of similar studies--it is recommended that management and technical assistance services be especially directed toward assisting small businesses in resolving problems relating to the following:

1. Attracting, developing, motivating and utilizing manpower resources
2. Controlling costs
3. Promoting sales and developing sales distribution channels

This does not imply, of course, that other problem areas should be neglected. All of the problems and needs that were reported by the small manufacturers that participated in the study should be considered in determining where emphasis should be placed in directing the assistance program. However, the three areas specified above should receive particular attention not only because of their significant preponderance in the survey results, but also because of their basic and universal nature. It is unlikely that these small business problems are bound by type of business or geographic area.

Manpower problems deserve special consideration in directing the services of the management and technical assistance program. Survey respondents reported more than twice as many problems in the manpower field than in any other area of small business operations. Small business manpower problems are also aggravated by the fact that they are influenced by an external factor which is beyond the immediate control of the individual

small businessman: many in the labor force prefer the security of a large company to what they apparently consider the insecurity of a small one, regardless of the employment attractiveness of the small company.

In view of the revealed seriousness of small business manpower problems and in recognition of the disadvantage under which the small business employer must compete in the general labor market, it is recommended that the Small Business Administration give serious consideration to the following two major contributions which could be made in assisting small businessmen in resolving manpower problems:

1. A general educational program is needed to encourage young men and women to consider the advantages of building a career in small business. This program should be directed particularly to the development of interest in small business management, but it should not neglect to promote the attractiveness of office, production, sales and other non-management jobs in small business. The immediate purpose of this program would be to help overcome the handicap that the small businessman now faces in the labor market; the ultimate goal of the program would be to strengthen small business management and operations generally.

2. A specific educational program is needed to indoctrinate small business operators in the basic principles of manpower management and to train them in the most effective methods of attracting, selecting, training and motivating employees. Unless small business managers learn to make employment opportunities attractive--in terms of salaries and benefits, working conditions, and advancement potential--the general educational program suggested above will be to no avail, and small businessmen will have to continue to struggle for the left-overs in the general labor market.

Without detracting from the importance of contributing to the solution of existing small business problems, it is recommended that even greater emphasis be given to the prevention of the development of problems which are common to small business. This means, of course, that assistance efforts should be directed toward the basic causes of small business problems. The above recommendations for positive action in the manpower field are examples of approaches that are primarily preventive in nature. The underlying causes of small business problems which were derived in this

study provide the bases for developing other programs which would contribute to the prevention of small business problems.

Certainly many of the day-to-day difficulties of small businesses could be avoided if small business operators were better grounded in the basic principles of small business organization and management. Serious and persistent problems would not develop if small businessmen could be taught to choose their competitive fields carefully, to develop and use their own and others' knowledge and skill wisely, to plan for the organizational needs of their companies and to take full advantage of the abilities of their subordinates, to place the proper value on manpower resources, to base their operating decisions on known facts, and to approach the challenges of their small businesses aggressively and with ingenuity.

Both small business and the Small Business Administration would benefit from a program of prevention: to the degree that problems were prevented, small businesses would operate more efficiently and the need for assistance in resolving problems would be diminished.

Limitation of SBA Services

It is recommended that the Small Business Administration limit its management and technical assistance services to those which are most helpful to the greatest number of small businessmen.

Any agency that attempts to assist a vast number of individuals or organizations is faced with a dilemma: the more personal and specialized a service is, the more useful it is to the individual or organization needing the service; yet, because of the limitations of time and personnel, the more personal and specialized a service is, the more restricted it is in terms of the number of individuals or organizations that can be served. This is the situation that the Small Business Administration and other assistance agencies encounter in attempting to serve the needs of small business. The choice lies between serving a few small businessmen exceptionally well or serving all small businessmen at some lesser degree of effectiveness.

There is little doubt that the individual small businessman would prefer direct personal assistance, and services which are tailored to his peculiar problems and needs. This was reflected in the results of this

research study. Personal counsel and advice on management and technical problems was reported to be very helpful by a larger percentage of users than any other service. The three services that most survey respondents reported that they would like to see expanded were all in the direct assistance area. With the exception of the suggestion that SBA services should be better publicized, the three most popular suggestions for improving SBA services were that technical and management specialists should be provided, assistance should be made available for specific industries, and SBA publications should be more specific.

While the value of direct and specialized assistance can not be denied, the feasibility of providing such services for all small businessmen must be considered. Obviously, if all small manufacturers, retailers, wholesalers, and service organizations were to demand direct and specialized assistance, neither the Small Business Administration nor any other assistance agency could begin to satisfy the demand. It is concluded, therefore, that services for small business should be restricted to those which can do the most good for the greatest number of small businessmen.

This conclusion casts serious doubts on the feasibility of attempting to provide personal counsel and advice on management and technical problems. While the demand for this service may not now exceed the ability to provide it, the continuation of this service should be weighed in terms of the ability to meet future demands, assuming that the service is better publicized. Although personal counsel may be of great benefit to one small businessman, it may place another small businessman at a competitive disadvantage if he is denied the same service because facilities are not adequate to take care of all requests for the service.

The recommendation that services should be provided which are helpful to the greatest number of small businessmen does not mean that no attempt should be made to be specific in the type of assistance offered. On the contrary, services should be as specific as possible within the framework of this general policy. Assistance in securing government contracts, for example, applies to only a small segment of the small business population. The provision of this specialized service seems warranted, however, since it is available to all small businesses which can benefit by and are interested in the service.

Education and information are the two areas in which the SBA management and technical assistance program can best serve the needs of the greatest number of small businessmen. These functions not only can be broadly applied, but also can be used most effectively in attacking the underlying causes of small business problems and needs. If small businessmen, through education and information, are able to eliminate some of the basic causes of operational and managerial problems, the need for direct and personal assistance in resolving surface problems will be materially reduced.

It is recommended, therefore, that the Small Business Administration continue to concentrate the efforts of the management and technical assistance program in promoting small business management education and providing information services for small business. Management conferences and management development courses should be broadened and strengthened. Next to personal counsel and advice, the small manufacturers that participated in this study indicated that management conferences and courses were the most helpful SBA services they had used. These could be made even more useful if they were offered in more widely dispersed areas and if they were designed to meet the specific problems and needs of a majority of small businesses in the areas in which they are offered.

In evaluating the Small Business Administration's role in providing an information service for small business, consideration should be given to the suggestion of the manager of one case study company that the Small Business Administration could serve small business better not by creating more things to read, but by assisting in organizing the information that is already available. Specifically, he suggests that the Small Business Administration should develop a digest and reference system and issue bulletins periodically by industry or area of interest so that each small businessman could identify quickly those sources of information which are of particular interest and value to him.

Outside of the areas of education and information, the appropriate limitation of the services of the Small Business Administration to those which are most helpful to the greatest number of small businessmen is best summarized by the president of one of the small manufacturing firms that was investigated during the case study phase of this project: "The

greatest contribution SBA could make would be to help small business help itself--not by doing the work for small business, but by contributing to the creation of an environment in which small companies can grow and prosper. In this regard, SBA should reemphasize its role as liason between small business and government--in protecting the rights of small business, interpreting regulations, policing set-asides on government contracts, and interpreting the practical needs of small businessmen in regard to proposed legislation."

Respectfully submitted:

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Appendix A
CASE STUDY ABSTRACTS

Exhibit A

CASE STUDY ABSTRACT (Company #1)

Background

This company is located on the outskirts of one of the major metropolitan areas. As a part of the food industry in Georgia, the firm has been in existence for over 20 years. Starting first as a proprietorship, it later became a partnership and finally was incorporated in recent years.

The company experienced a gradual growth. Despite several setbacks during its development, the company is now well established with a sizeable share of the market in the local and neighboring trading areas.

The management staff of the company is small. The owner-manager maintains close operating controls over all phases of management and retains all authority for planning and decision making.

The company employs approximately 50 people, about half of whom are production workers. Its products include a variety of meat items, chiefly pork products, sold in a 60-80 mile radius of the plant direct to independent and chain stores. Current sales amount to approximately \$2,000,000 per year. Manufacturing facilities are attractive and well maintained, and processing systems appear to be well designed. All purchasing is handled by the owner-manager; most stock purchased comes from the local area, but some is bought in the Midwest. There have been no recent capital financing problems. The company's current competition comes largely from several national firms and one independent company in the local area.

The most significant points to be considered in viewing this company are the changes that are gradually being made in the face of long-established industry practices. New approaches to advertising, general management, and processing are being applied. Many aspects of this industry have remained unchanged over the years. The owner of this company recognizes the hazards of obsolescence and is making an effort to introduce new practices as a means of streamlining his operations.

Problems and Needs

Organization

As in many small companies, most of the executive authority is retained by one man. This is particularly true in this case. However, the owner recognizes that he must share some of this load. He also recognizes the importance for developing a reserve of management potential. He is now planning to employ a young management trainee to gradually assume some of the administrative load he is carrying.

Personnel

The recruitment of capable personnel is the major problem particularly in the case of management and sales personnel. This seems to be an industry problem--not one confined only to this company. The owner has suggested that SBA might profitably consider the desirability of setting up a free employment referral service, designed to give small businessmen a source of applicants who are interested specifically in working in small business management.

Another area of personnel which requires attention is the need for an improved employee training program. Most training is done on the job. It is frequently difficult to give new employees the range and depth of training which is needed for their maximum efficiency.

Sales

Securing and keeping a profitable share of the market has been the basic sales problem of the company. Competition is severe, and it has required a relatively long period to build customer acceptance. Now, however, the company's products are widely accepted in the market area. In regard to future needs, there is the continuing problem of building and maintaining good customer relations. A more complex marketing problem deals with the difficulties encountered in introducing new products. Consumers react in unpredictable ways to new products. SBA publications would be particularly helpful in guiding the study of new product possibilities, market potential, etc. Two major factors are involved: the retailer must be persuaded to hold down his markup until the product has gained acceptance; customer acceptance is at best a gamble, and advertising expenses run high on new products.

Manufacturing

The introduction of new processing and packing methods is a major problem and will continue to require study. Relatively few stages of the processing lend themselves to automation, but some mechanization is possible. This appears to be particularly true in the area of wrapping meats. Already some improvements have been made in the methods of slaughtering and butchering stock. The further use of mechanical materials handling devices would be most helpful. SBA's technical services might offer some assistance in the industrial engineering aspects of this problem.

Financial Management

It is essential that accounting controls be refined. They are now established on a more or less informal basis in regard to costing of products. As in most small companies, there is a need for a relatively uncomplicated system for identifying costs, determining which production areas are too expensive, and analyzing the best production methods in terms of their cost.

Role of SBA

The president of the company was not familiar with SBA services until he recently received sample copies of SBA brochures and publications. At one time he had considered applying for financial assistance from SBA, but he later discovered that local bank financing offered easier, more direct financing.

In regard to SBA publications, the president feels that they are generally good but that he does not have the time to read them. In his opinion, SBA could provide a more meaningful service by:

1. Providing more personal technical assistance in accounting systems.
2. Maintaining a management personnel screening service for small business.
3. Providing specialized training courses, if necessary by correspondence, designed to meet the specific needs of an industry. For example, it is suggested that management training courses could be developed around the specialized operating problems representative of the industry.

Summary

The potential of this company is very good. It has established itself in the minds of both consumers and retail customers. Its financial status is good. The present owner shows imagination in his sales efforts and is unusually well versed in all phases of his company's operations.

Perhaps the most critical consideration in this case is the need for development of reserve management personnel who will be capable of assuming some of the president's administrative work load. If this is not done, the president's executive effectiveness will very likely be weakened.

Exhibit B

CASE STUDY ABSTRACT (Company #2)

Background

This firm is a part of the chemicals and allied products industry. The company is less than five years old and relatively small (less than 25 employees). Located near one of the major metropolitan areas in the State, the company is a remarkable example of rapid but well-planned growth. The firm was incorporated from the start. Its organization and management make it an especially desirable subject for study.

The company employs approximately 25 workers, about five of whom are professional and technical employees. Its products are highly specialized chemical agents, sold through salesmen and distributors to some 1,200 customers in 20 states. Manufacturing facilities are good. Since this is essentially a blending process, the system is relatively simple. The most elaborate facilities are the testing and quality control laboratories. Financial management appears to be well controlled; weekly sales and operating statements are prepared and analyzed closely. The company takes a most conservative position towards its use of outside capital. The competition encountered in this field comes from the major ethical drug manufacturers and from small producers of industrial sanitary agents.

In considering the environment in which this company operates, it is important to recognize two factors: first, the firm's success was built upon a highly specialized market; second, the founder of the company showed exceptional ability and energy in preparing himself for this venture.

Problems and Needs

Organization

Despite the small number of employees, the firm has a fairly sophisticated approach to organization needs. Periodic staff meetings with department heads permit a free interchange of ideas. Questions concerning planning, new products, etc., are discussed at these meetings before the president makes the final decision. The company has also profited by the policy

of delegating authority to carefully selected subordinates; this permits the president to utilize his time more effectively.

Even with this generally desirable approach to organization, the president feels that the brain power of the staff is still not utilized as effectively as possible. It is especially important in companies dealing with technical products to make maximum use of staff skills. In this connection, SBA management conferences might be of value in developing techniques to insure maximum staff participation.

Personnel

Many personnel problems have been avoided by the president's emphasis on selecting employees who are uniquely suited for the company. The president looks for men who have an intense desire to succeed, who want to build a career in a young company, and who take pride in personal accomplishment. He feels that individuals must be screened carefully to avoid those persons who are not flexible enough to meet the demands of a small organization.

In the past, there have been occasional problems--employee grievances, disagreements between personnel, etc.--which are not unusual in business but which seem to have been of great concern to the president of this company. It seems likely that the atmosphere of the company contributes, at least in part, to this situation. Management is aggressive, and the employees are expected to be constantly active and effective in their jobs. All of this contributes to a rather fast-paced atmosphere--one in which there is little opportunity to avoid decisions and the conflicts that decisions often create.

Sales

The sales program of the company is highly specialized and, like most of the other operations, geared to a fast pace. The president of the firm is an extremely active individual, and he sets the pace by concentrating on the wide-scale development of new customer contacts and personal sales promotion efforts. Naturally this takes a great deal of time. It might be profitable for management to review the distribution of executive time spent on field contacts. This is not to suggest that the chief executive should not devote a large percentage of his effort to sales development; it does imply that this approach can snowball to the point that other general

management duties can be seriously neglected without quite realizing it.

The development of highly specialized products has been one key to the firm's success. The continued development of such products is of major importance. As in many small companies, there are relatively limited resources for research and development. In an industry of this type, the research and development share of the budget must be fairly substantial. It would be helpful for the Small Business Administration and for state and other federal agencies to expand the current distribution of the latest research results.

Financial Management

The company's accounting and auditing system appears to be well organized and administered. Perhaps the most basic problem in this area deals with the current tax structure. The president suggests that it would be most helpful for the small businessman to be allowed a tax moratorium for the first year or two after a company is started. In addition, a fixed depreciation scale would permit small companies to write off equipment on a more reasonable basis.

Role of SBA

SBA services have not been used in the past by this company. The president is familiar with the business loan services available, but he has other sources of capital available.

Summary

In the past, the company's customers have been restricted to one industry. Although this particular industry has been highly profitable in recent years, only the most efficient operators are expected to survive the increased competition in the future. In order to prepare for a possible reduction in this market, new products are being developed for application in other fields.

This company is notable for several things. It is young, very successful, and was planned with a degree of care and foresight unusual in small business. The president of the firm showed remarkable enterprise in his own self-education for a specialized industry. He prepared himself carefully, investigated licensing and manufacturing standards, and experimented with his ideas on a small scale before venturing out on a large scale.

The firm's success can be attributed to the president's skill in developing and marketing a highly specialized product, in the unusual care given to management controls, and in the emphasis on customer service. As an example of the general attitude in this case, the president indicates that he is not now interested in obtaining additional capital for expansion. He feels that his operation is growing on a planned basis now; to introduce new capital at a time when future plans are not refined would be an invitation to spend unwisely. This is a refreshing approach to the capital requirements of a small business. There is every indication that the company will continue to grow as long as these same guidelines are followed.

Exhibit C

CASE STUDY ABSTRACT (Company #3)

Background

This company is a part of the general apparel and other finished textile products group. Located in a small town, the firm was established less than 20 years ago. The founders were experienced in garment manufacture and for some time had sought a suitable location for a small independent plant. The founders were able to meet capitalization requirements from personal savings. By careful control of costs, the company has enjoyed gradual growth without major setbacks.

The firm is now incorporated. It employs between 75 and 100 workers, most of whom are women. The company is essentially a contracting operation, producing one type of garment for a limited number of large customers. Contracts are negotiated directly with the customers, most of whom are widely scattered over the country. Manufacturing facilities are somewhat limited and appear to restrict the sales of the firm: business contracts potentially available would require a doubling of current space.

Financial management lacks some of the complications found in other industries. Purchasing is minimal since the fabric for finished garments is supplied by the customer. This eliminates a tie-up of capital in raw materials. Accounts receivable are also superior, and prompt payment is the rule.

This company is fairly typical of many firms in the State. Management was experienced in the field and organized and developed the company along the lines of past experience. The industry itself is a familiar one in this part of the country. Like many of its counterparts, its location in a small town made it a center of local interest. The company has perhaps shown a greater degree of stability than some others. Management has taken a responsible attitude in regard to its own role in the community.

Problems and Needs

Organization

The company has been closely controlled, with most authority retained in the hands of the president. In recent years, the need for a spreading of management authority resulted in the addition of a management trainee. This young man must necessarily be an individual of varied talents. He is concerned not only with general management, but also with engineering duties (time study, etc.) that would normally be assigned to a staff engineer or department.

Personnel

Some of the company's most critical problems are found in the personnel area. The recruitment of capable employees presents a difficult problem. Most such workers are untrained. In order for them to produce effectively and to earn reasonable rates of pay, their training must be thorough. Since they are paid on a piece-rate basis, it sometimes happens that new employees become discouraged and quit before they have attained sewing proficiency. For other reasons, too, the rate of turnover and absenteeism appears to be quite high.

Management is also concerned with the quality of its employee relations. The plant is not unionized. Considering the nature of the industry and the large number of female workers, the quality of employee relations is actually about on a par with similar firms.

In considering the overall needs of the personnel program, it might be profitable for the firm to consider the available advisory services of the State Department of Labor, the federal employment advisory agencies, and the technical assistance program of the Small Business Administration.

Generally speaking, it is understandable that a full-scale training program would be difficult to administer. However, to the observer it appears that many personnel problems spring from the basic need for well-rounded training and orientation on the job. When employees are unfamiliar or in doubt about the policies, work practices, and requirements of a company, they frequently tend to suspect the worst. It is very likely that the overall training program of the company could be expanded, even at reasonable expense, as one immediate attempt to solve these problems.

Manufacturing

Production planning and control becomes a problem especially during rush seasons. Planning is usually done on the basis of lot orders. One complication in this area probably develops from the rather crowded conditions in the plant. Space limitations tend to confuse control unless the placement of machinery and personnel is carefully planned.

Quality control is another extremely important consideration. Related to the problem of personnel training, the rejection of inferior goods is expensive not only because the minimum wage applies regardless of output, but also because the return to the worker of a rejected item is a source of irritation to her.

The overall work flow system might well be reviewed with an eye toward the possible realignment of workers and equipment to establish control check points. Improved employee training should also decrease the rate of rejects.

Competition

As in some other industries, the rate of foreign competition is increasing. In some cases, it is reported that the raw fibres can be shipped to the Far East, manufactured into garments, and be shipped back to Georgia to be sold at a lower price than those made locally. This situation is one which is beyond the reach of local interest. It requires federal legislative consideration.

Role of SBA

With the exception of the loan assistance program, the management was unfamiliar with the other services offered by the SBA. It was suggested that the SBA might better the competitive position of the small manufacturer by supplying periodic information on the quantity of various imports in this industry and on the tariffs and quotas which apply to them. The need was also expressed for a newsletter of recent developments in labor-management relations in small businesses. The president feels that the personal consulting services of SBA are useful and should be made more readily available.

Summary

This company appears to be well managed. Management demonstrates a more thoughtful attitude towards its responsibilities than is sometimes found. Expansion of the plant is now under consideration. A final decision on

expansion is more dependent on the projection of a stable work force than it is on the cost of acquiring larger facilities. If necessary, the firm may be forced to consider an out-of-state location in seeking a suitable labor market. The president is also considering the employment of a consultant group to review his operations and determine any areas of improvement.

In summary, this firm appears to be stable and profitably operated. It would be unfortunate if circumstances, whether due to the lack of an appropriate labor pool or the growing volume of foreign products, should weaken its position.

Exhibit D

CASE STUDY ABSTRACT (Company #4)

Background

This company is one of the older firms in the stone products group of industries. Located in a small town, the firm developed, like other local companies, around the quarries in the area. The area itself is one of the major sources of specialized stone products in the country.

The company employs approximately 70 workers, about half of whom work in the plant and about half in the quarries. Almost 95% of the company's products are stone monuments, most of which are sold through commission agents to retailers east of the Mississippi. Manufacturing processes are highly traditional. Although more modern innovations are now being made, many production methods have been relatively unchanged for years. Financial management appears to be reasonably well directed except for certain needed improvements in cost accounting. Perhaps one of the greatest considerations in terms of cost is the problem of waste utilization. An answer to this need would be of extreme value to the industry as a whole.

As in all situations, the environment in which a business operates locally affects its management practices. The concentration of this industry in the particular area, the traditional aspects of production, the great problem of waste utilization, and the large number of small-scale competitors must be recognized in viewing the overall operations of the company.

Problems and Needs

Organization

The organization of the company is relatively simple. The firm is family held, and the president retains almost all planning, coordinating, and decision-making responsibilities. Under certain circumstances this arrangement may be perfectly satisfactory. However, the management of modern business is frequently too complex and too demanding to be conducted by one person. The pressure of sales management planning, factory supervision, etc., frequently creates loads which must be shared. It would be

appropriate to consider the possibility of reviewing the organizational structure to determine any possibilities for delegation of authority.

Sales

As in many companies, the development of an effective sales organization tends to become a major problem. The salesmen used by this company work entirely on commission; they are, in a sense, manufacturer's agents since they sometimes carry more than one line. When a salesman represents more than one company, there is difficulty in controlling the representation of the product. A somewhat related problem deals with the need for more specific sales policies as a means of building greater salesman loyalty. Salesmen naturally must feel that their own interests are assured before they can serve the company effectively.

The company might find it helpful to consider bringing the sales representatives into the life of the company to a greater extent. Sales meetings, conferences, etc., are of particular value in dealing with agents. The agent frequently feels no particular interest in the company beyond his opportunities for making a profit. If he is drawn into the operations of the company and made to feel a part of the firm, his attitude frequently changes to a more personal one.

Finally, it should be of particular importance to build up reliable data about product potential, possibilities for diversification, and other appropriate market data.

Raw Materials

The location and development of good quarry sites is essential if a company in this industry is to be self-sustaining. Although some smaller firms buy their stone from the quarries and shape it in their own plants, this company has its own quarries. As long as the quarry vein holds, the company is assured of a supply of stone. As the vein begins to run out, new sources of stone must be available. The search for good quarry sites has been compared to "wildcatting" for oil--there is the same hazard that the expense and effort may not be justified by the return from the quarry.

Manufacturing

Special study should be given to plant design and layout, taking into consideration the most recent developments in materials handling, cutting, and polishing devices. Stone cutting has been mechanized to an extent, but many of the processes are still slow and cumbersome. Particularly important is the problem of materials handling. Stone is handled in extremely heavy sections and is moved frequently, usually by overhead crane.

Reasonable grading standards seem to plague most companies. Grading standards should be developed for the industry as a whole in order to standardize the quality of the products and also to place a more predictable limit on rejects.

Financial Management

Cost controls appear to have been difficult to establish. Management recognizes some operations are unprofitable but is unable to determine the specific sources of excess costs. A system of cost centers might be of value, using certain standard costs with a provision for variables.

Role of SBA

There is no question that smaller companies must take advantage of modern management controls if they are to compete successfully in the future. In this regard, it has been suggested that SBA's management conferences would be of particular value in areas such as this where a large number of small related companies are located.

SBA's technical services should also prove beneficial. Many of the companies in this area have similar problems. A technical survey of the industry in this area would have wide application among a number of small firms.

Summary

Although the supply of the type of stone used here is reportedly unlimited, the continued profitable operation of the small stone processor will be determined by the extent to which modern engineering methods are applied. Many small firms will have serious problems. It is anticipated that a growing number of mergers will be made in the future. The requirements for additional capital and for expanded marketing efforts will

require the consolidation of the marginal operators. It should be profitable for the firms in this area to continue trade association studies in markets, sales promotion methods, opportunities for diversification, and other fields essential to sound planning. Although this company is firmly established, it would benefit from reconsidering the organizational structure in terms of delegation of authority, strengthening the sales force, and developing a more adequate system of cost control.

Exhibit E

CASE STUDY ABSTRACT (Company #5)

Background

This company, founded more than 20 years ago, is one of the older firms in the State's tufted bedspread and carpeting industry. Located in a town of medium size, the company has grown from a "cottage industry" origin to a substantial operation employing approximately 100 workers.

Like many other companies in this industry group, the company was started in the early days of chenille popularity. Originally, much of the work was farmed out to women who made bedspreads and other products in their homes. With the advent of federal minimum wage legislation and the development of modern tufting machinery, factory production began to dominate.

This company is family held. Its products include both bedspreads and carpeting sold through commission agents in most of the country's major metropolitan areas. Manufacturing methods have been gradually improved, but lack of space and materials handling difficulties still present serious problems. As with many other firms in this industry, this company for several years found it necessary to factor its accounts. The practice was discontinued when the company's financial condition improved.

It is important to recognize the traditional aspects of the industry, many of which have carried over into present-day operations. The basic tufting methods are unchanged although modifications are continually being made in the design of machines. This company has shown a considerable degree of engineering ingenuity, however, in making the best of somewhat outmoded facilities.

Problems and Needs

Organization

In planning for the continued growth of the company, perhaps the major need is the development of management reserve personnel. The somewhat unpredictable future of the chenille industry leads many young men to avoid the industry for long-term career planning. This has created a problem in

developing intermediate supervision. As the company is now organized, the general manager carries most of the management work load. One man is in training for production management. Aside from this one individual, the company has no management resources in training.

As one means of solving this problem, it has been suggested that the most appropriate method may be a training program designed to develop leaders from among the production workers. One company (in another industry) chose the approach of selecting two men, one from a group of young college graduates and one from among the production worker group, giving them a concentrated training course in production management. At the completion of the training course, both men were assigned to first line supervisory jobs. The cost of this training was approximately one half of each man's annual salary, since the training course was six months long. Although they were non-productive in the usual sense during this period, the background they absorbed made them invaluable to the company.

Personnel

Most of the 100 employees are production workers, and the majority of these are women. One of the problems in this area is the long training time required for a worker to become proficient in operating tufting equipment. Although the large number of women workers brings with it an increased absentee rate, women have been found to be much more adept at the demanding tasks of tufting than men, and their work quality has proven to be much higher.

The company is not now unionized. Management feels that the essential problem resulting from union organization would be the tendency to freeze workers in jobs and lines of progression, thereby reducing the flexibility required in small plant operations.

Sales

The demand for the company's product appears to be good. The company has been wise in developing a particular type of marketing approach which takes it out of the general class of competitors. Product design appears to be the major problem in this area. The chenille industry seems to have had a tendency to react too slowly to changing consumer preferences. At one time consumer interest was concentrated on the design of the chenille

product. As in many other small companies, this company tends to follow the industry leaders in making changes in product design. As one example of changing consumer preference, market demand has now changed to one of interest in the texture of the product. A more comprehensive effort in market research may be justified by the chenille groups in order to accomplish a better and faster reaction to market changes.

Manufacturing

Within the limitations of space and materials handling problems, management has done a very good job of plant engineering. The plant itself was outmoded when bought. Space limitations now create serious problems. Handling of finished carpets is largely manual because the many supporting columns and the low ceiling of the plant prevent the use of fork lifts. It seems likely that these problems will not be resolved effectively until more appropriate plant facilities are located. Management has considered several existing structures, but it appears that for maximum effectiveness a low-cost steel structure designed for maximum floor clearance should be considered. The SBA technical services should be able to provide specific engineering advice regarding the company's needs.

Financial Management

Accounts receivable require special attention in this situation. Many customers are marginal credit risks, and a careful check of all new customers is made. Cost accounting is relatively difficult in this particular operation. The current method is based on an analysis of quarterly inventory expenses.

Inventory Control

A simple but effective control system is used. It is presently maintained by the general manager--a task he might well delegate.

Role of SBA

Management of this firm has had no previous experience with the SBA except for a course attended by the general manager. He participated in a two-week course in Human Engineering and was very pleased with the training. He feels that such courses are of considerable value; he has used some of the techniques learned in his meetings with employees.

The general manager suggests that SBA could be of assistance by providing other types of supervisory training courses. He would also like to be able to draw from a library of training films. Finally, he suggests that SBA should expand its technical services and make them more easily available to small businessmen.

Summary

This firm originally produced chenille products which were directly competitive with the general industry lines. As competition intensified, management recognized that it would be impossible to compete with the larger companies on a broad scale. It therefore changed its product line to a highly specialized item--one not profitable, because of its special characteristics, for the larger companies to compete in. The pursuit of this policy has probably been the main key to the firm's continued success. It avoided the fate of many small chenille companies by recognizing that its existence depended upon providing for unique, not general, consumer needs.

The company has established a widely recognized reputation for quality. Assuming the continued approach to specialized production and a sensitivity to changing consumer tastes, the company should anticipate further growth. In the relatively near future, it may be necessary for management to invest in new factory facilities to improve handling and production methods.

Exhibit F

CASE STUDY ABSTRACT (Company #6)

Background

This company is an excellent example of rapid growth from small-scale to substantial operations. The firm is located in one of the metropolitan areas of the State and can be considered a part of the general transportation industry (SIC 3700). Its products are manufactured for relatively specialized transportation needs and fall within the range of heavy equipment.

The company was founded less than five years ago. Approximately 300 workers are now employed, most of whom are production personnel. The company's products are surprisingly diversified and are either sold, leased, rented for special purposes, or used in the company's own operations. The sales area covers the eastern seaboard and in some cases goes into Central and South America. Manufacturing facilities and equipment appear to be basically adequate. As in several other phases of the company's operations, its expansion has been so rapid that it has been difficult to provide ideal facilities. Financial management controls appear to be very effective, and accounting systems are well defined. Purchasing and inventory control requirements are substantial and well organized.

In viewing the overall operations of the company, it is important to point out that the company has shown an admirable aggressiveness in that most essential requirement---sales development. As sales and manufacturing demands increased, the requirements for administrative controls increased substantially. While there are still refinements to be made, management has been most alert generally in developing and installing effective procedural controls including, to a limited extent, data processing equipment.

Problems and Needs

Organization

By 1959, the expansion of the company prompted management to reorganize the firm. While most of the planning, coordinating, and decision making still lies in the hands of the two top executives, an increasing amount of

middle management participation seems to be developing. The company was fortunate in securing an additional member of its executive staff whose chief assignment has been to consolidate, through organization, the operational gains of the company. In addition, the further formalization of policies and procedures is expected to tighten up the administration of the firm.

Personnel

Perhaps the most basic personnel problem confronting the company is the shortage, both current and anticipated, of skilled production workers. Recruitment appears to be extremely difficult. The State Employment Service has been of some value, largely in its facilities for publicizing job orders throughout other cities in the State.

As in some other areas, a major vocational training need is appearing. Local facilities do not seem to be able to provide the necessary training in blueprint reading, welding, burning, etc., as a basis for on-the-job training. The lack of suitable vocational training facilities and the recruitment difficulties point up again the need for more diversified labor resources in the State.

In this connection, the company is gradually reaching the size at which it may require an industrial relations function. The work is now assumed by the office manager, but this function is of sufficient importance to warrant individual attention. This is particularly true in regard to the planning of manpower needs and the administration, if necessary, of a more comprehensive on-the-job training program.

Sales

A large percentage of the products sold by the company are bought by public agencies. Sales are negotiated through competitive bidding procedures and generally handled by members of the executive staff. A major problem in this type of sales effort is the development of reliable market forecasting information. The company has shown a profitable aggressiveness in seeking out new contracts, going into new regions to seek out and develop prospective customers. As in the case of some other heavy industries, a relatively unique concept of market research is involved. Reliable

forecasting requires not only a broad knowledge of the plans and policies of various public agencies, but also of the engineering problems likely to be encountered by these groups.

Sales promotion is closely related to the development and design of new products. The sales effort therefore requires a degree of imagination in the development and promotion of new engineering ideas on a fairly substantial scale.

Manufacturing

There are continuing technical problems involved in improving the output capabilities of the plant. The manufacture of heavy equipment presents special engineering and production problems. Equipment and labor costs must be carefully controlled and engineering design thoroughly developed to avoid expensive technical delays. The development of time- and cost-saving methods must be efficient if contract costs and deadlines are to be met.

There is also the constant problem of establishing an optimum requirement for space, equipment, etc. It would probably be profitable to review existing equipment capabilities to determine what additions or replacements should be made.

Financial Management

It is noteworthy that the company is beginning to make use of advanced controls. The recent installation of automatic key punch and verifier machines has facilitated the handling of payroll data, and the local service bureau provides sorting and translating facilities. The installation of this device makes it possible to process payrolls quickly and accurately and to analyze labor costs more efficiently.

Inventory Control

The company maintains a more formal system of inventory control than that found in most companies. The system operates on a last in-first out basis, and detailed stock control cards (carrying extensions of unit costs) are maintained by the purchasing agent.

The lack of centralized warehouse space appears to create some problems. Withdrawals from stock may require trips to widely separated warehouse centers.

Role of SBA

This company is rapidly growing out of the "small business" class. In regard to SBA services available, management may find that SBA's technical and managerial publications would be of interest. It is unlikely that SBA's technical services could contribute engineering skills beyond those already available on the company payroll.

Summary

One of the most striking things about this company is its aggressiveness in developing contracts. Management has shown a willingness to search out new opportunities rather than simply wait for new ones to develop. In addition, the products of the company are diversified to the point that several avenues of major sales effort are available. These are advantages which, properly controlled and coordinated, should assure the continued growth of the company.

Exhibit G

CASE STUDY ABSTRACT (Company #7)

Background

This company is a part of the lumber and wood products industry. Located on the outskirts of a medium-sized town, the firm is one of the older companies included in this study. Although it originated before the 1920's, the company had not shown any unusual development. The present management assumed control of the company approximately 25 years ago. In recent years, a new approach to the marketing of its products was initiated, and the company has now expanded along very specialized product lines.

The present owners are long-time residents of the area. The president has been active in various business ventures, but his chief interest centers around this company. The firm employs approximately 50 workers, most of whom are unskilled. Pine lumber is the primary product of the company, but its intended usage is very specialized. Only a very little production is used for conventional building purposes. Since the firm's entire output is normally sold to a restricted number of customers, sales negotiation and promotion is largely handled through one distributor.

Manufacturing facilities and systems appear to be adequate generally and, in some instances, superior. Like most such operations, production does not lend itself to refinements possible in many industries. However, the president has designed and installed a number of improvements that reduce handling and improve quality control.

Financial controls are maintained on a relatively refined basis; monthly cost analyses are made and current cost estimates are considered reliable. The company does not appear to have the severe raw material problem that confronts many other wood-using industries. Inventory controls are at a minimum. The company is in the fortunate position of having to maintain only very small inventories, which also frees working capital. Capital requirements have been met with no serious difficulty. Competition is not particularly severe except on those sporadic occasions when other firms attempt to invade the specialized field of this company.

Problems and Needs

Personnel

The basic personnel problem is one of developing good management manpower to meet the future needs of the company. Many young men show little interest in entering small business. The attractive opportunities and benefits offered by larger companies make it difficult to recruit the kind of management potential needed. It is becoming increasingly important for management to train responsible individuals for gradual assumption of planning and operating supervision.

Sales

In the past, management showed initiative in searching out a new market for its products. By doing so, it escaped some of the problems of production for the conventional building industry and it also lessened its competition. Management recognizes that new opportunities may need to be developed in the future. Wood products are varied, and many firms are turning to such special items as composition board, pallets, etc.

Manufacturing

The major problem encountered in the development of the company appears to have been the difficulty in planning and developing adequate production facilities to meet growing sales demands. Most smaller companies cannot profitably maintain the staff and engineering personnel needed to specialize in these areas. Management has done a good job in this case. The materials handling system was designed and built by the president, with substantial savings on conventional estimates.

The requirement for efficient production and handling methods will continue to be of importance. As now operating, wood is brought into the plant after being first debarked and rough sawed in the field at portable saw mills. Field sawing has the particular advantage of eliminating the handling and disposal of slabs and bark at the plant site. In addition, the truck hauling capacity for sawed lumber is much greater than for logs. These practices save time and money. Management should continue to search out similarly efficient systems.

Role of SBA

The company's sole experience with SBA involved an inquiry about financial assistance for the building of a part of the processing system. The company's impression was that SBA's requirements for detailed engineering plans seemed unreasonable. The president feels that many small companies cannot spend great amounts of time and money in preparing formal plans; most tend to project their requirements in their own working terms and then complete them when they can reasonably do so. The system involved was finally designed and built by the president and his own workers. As a matter of interest, the total construction cost was probably not a great deal more than the expense of a consultant's detailed design and engineering specifications.

In regard to SBA's technical services, some of the agency's specialized engineering services might be of value in this situation. As with many small companies this firm was not aware that technical services were available.

Summary

The company appears to be well managed. Engineering operations are smooth, and the firm has obtained a good position by developing a specialized product line. The company will continue to require careful planning for expansion and possibly diversification. The need for development of new products is very important. Closely related to the sales program is the possible need for investigating new sales outlets and methods of distribution. As an important phase of overall planning, continued work will be required to maintain the most efficient production and handling methods.

Exhibit H

CASE STUDY ABSTRACT (Company #8)

Background

Located in a medium-sized town along the Georgia coastline, this company is one of the many small firms included in the sea food packing industry. Established over twenty years ago, it has grown into a substantial operation with products widely distributed throughout the eastern half of the country.

The company currently employs approximately 150 workers, most of whom are women. The company deals with two types of sea food, part of which is sold through brokers and the balance direct to outlets located along the eastern seaboard, in the Midwest, and in certain parts of the South. Packing facilities appear to be superior in layout and in handling systems. As in all food handling industries, plant maintenance is closely related to quality control. Quality control standards here are very high. Product quality is under continuous surveillance by the company's own food technologists as well as by state and federal inspectors. Financial management controls appear to be well developed. Management has a good knowledge of the balance of internal costs and has been able to recognize those products and processes which are marginal. Except for the growing problem of imports, competition has not been particularly keen. Domestic competition appears to be reasonable.

The growth of the sea food industry in Georgia warrants some comment. Before 1948, almost all sea food was sold on fresh markets. In that year, shrimp processing plants came into operation. As the breeding plants grew, they gradually took control of the market away from fresh shrimp brokers at the New York markets. During the period 1950-55, the market for shrimp was very good. More boats were put into operation, but the actual catch per boat began to decline. The shortage of shrimp which developed during this period resulted in a growing import volume. (Domestic production of shrimp is about 60% of U. S. consumption. The balance of the demand is being met by an increasing volume of imports from Mexican, Panamanian, and other foreign sources.) As inventories began to build up, prices weakened and in 1959 fell off sharply in recognition of heavy carry-over inventories.

The sea food industry has assumed major proportions in the coastal regions in terms of capital investment, share of the market, and in the manpower involved. A large number of women are employed in these plants. In addition there are substantial numbers of male workers both at shore installations and aboard the fishing fleets.

The overall operations of the company should be viewed with the above considerations in mind. The particular characteristics of the market and of the industry have been important factors in shaping the policies of the company.

Problems and Needs

Personnel

There has been a continuing problem in recruiting young men as management trainees and into service as boat captains in the fishing fleet. The industry association might well consider the possibility of publicizing the opportunities for young management men in this industry.

The company has experienced some difficulty in recruiting women workers. Due to local labor market conditions, there is a shortage of capable women workers and there tends to be a fair amount of movement between companies. In those cases where employees are paid on incentive, the delay in building proficiency while in training (and the subsequent delay in earning power) sometimes disappoints new employees and contributes to turnover.

New workers on the fishing boats also require special training in the maintenance of motors, net repair, and handling of boats and nets. Considering the importance of this industry, it would be appropriate for state and local authorities to consider making use of available federal assistance to conduct suitable training courses.

Sales

The development of new markets has been a problem in the past and will continue to demand the attention of the industry as a whole. Certain sea food products have good consumer acceptance. Other products need more frequent and imaginative promotion.

The sales of American packers have reportedly suffered from the growing volume of imports. Domestic overproduction has contributed to some price weaknesses. Congress is at present considering a bill which would limit shrimp imports to a gradually increasing scale. In addition, past experience may well have demonstrated to shrimp processors the wisdom of scheduling production on a more conservative basis.

Manufacturing

Processing methods are gradually being refined. Although much of the work is still done by hand there are in this plant several late model innovations for use in washing, picking, and pasteurizing sea food meat. Quality control standards are such that constant attention must be given to product control. The company employs a firm of food technologists who provide consulting assistance on bacteriological control. In addition state and federal authorities also inspect product quality.

Role of SBA

The management of the company was generally familiar with the publications and services of SBA, and one employee has participated in a management conference. He found it generally interesting and helpful. The company has not had any contact with SBA in regard to its business loan service.

It is likely that SBA's greatest contribution in this type of situation is in the technical services it can provide. Market research assistance, production methods advice, and general management conferences should be of interest to the company.

Summary

The company management leaves an impression of stability. Top management is young. Their past management indicates an appreciation of industry needs as well as their own needs. They have shown a willingness to adapt new techniques and equipment to meet changing needs. If they choose, there are several avenues open for diversification. The company has been successful because management was willing to gamble on new ideas, recognizing that the products and production systems had to be up to date if competition was to be met.

Exhibit I

CASE STUDY ABSTRACT (Company #9)

Background

This firm is located in one of the larger metropolitan areas in Georgia. Since it was founded before the turn of the century, it is the oldest of the companies included in this study.

A part of the woodworking and furniture industry, the company is unique in many ways. Strong family traditions support the company's reputation for quality and craftsmanship. Management has been faced with the problem of relaxing its own standards of quality or losing business to volume producers who manufacture for the less demanding tastes of the mass market.

The company employs less than 15 workers. Its products include furniture and fixtures for both residential and commercial use. Most of the products are sold in a 75-mile radius of the plant to homeowners, business houses, architects, decorators, etc. Manufacturing and scheduling are done on a custom basis except for a small number of standard items. Facilities and equipment are adequate. Quality control is of particular importance and its maintenance occupies a good part of management's time. Financial management is uncomplicated and appears to be reliable. Bids are made for new work on the basis of management's long experience in estimating material and production costs. In this type of operation, standard costs would be difficult to establish. Purchasing is largely limited to the buying of wood, some of which is available locally, some from northern states, and some (like mahogany) imported. The company has had no capital problems in recent years. Competition comes from both the large volume producer and the smaller "shade tree" amateurs.

Unlike some modern manufacturing operations, the methods of this company retain much of the traditional characteristics of furniture and cabinet making. The company's operations have been geared to the production of hand-made items. On one hand, the company can offer its customers the assurance of a well-made product. On the other hand, it is difficult to sell quality against the price differential that develops with both amateur and volume competition.

Problems and Needs

Personnel

The major problem confronting the whole cabinet-making industry is one of obtaining skilled workers. This situation is not new. The local vocational training school has made an effort to train young men in this field, but the quality of training (especially in regard to blueprint reading and design) has been poor. Efforts to provide on-the-job training have generally been unsuccessful. Too often a young learner loses interest in the potentially rewarding pay of his craft when he has an immediate chance to improve his trainee earning by taking a production line job.

The severity of this shortage is best illustrated by the extent to which many firms have gone in recruiting craftsmen. This company found it necessary in one case to employ a foreign craftsman and pay his expenses to this country. After working here for an agreed period of time, the man left the company to join a group of his countrymen in starting their own shop.

In reviewing the vocational training needs of the State, it would be well for educators to consider the development of a more extensive vocational advisory service and to take steps to insure a high quality of vocational training. The quality of vocational instructors is of great importance.

Sales

The company is faced with the continuing problem of maintaining its share of the market in competition with volume manufacturers and the smaller, sometimes amateur, competition. Competition is most severe from the smaller shops whose chief tactic is price cutting. The president of the company attributes most of the failures among his competitors to a lack of ability in establishing accurate cost estimates. In many cases they are marginal operators to whom one major loss is fatal. In regard to competition from larger companies, current consumer tastes place more emphasis on eye appeal than sound construction. This is an ideal situation for the mass producer. It permits him to reduce construction costs to a minimum.

The company is faced with an unstated problem of diversification. It is not likely to be relieved of manpower or competitive pressures until it redirects its operations in some fashion. It might be well for management to consider an additional product line which would be noncompetitive with

the smaller shops locally and which would also be less demanding in its requirement for highly skilled manpower. This is not to suggest that the company abandon its long-established reputation as a manufacturer of quality products. It does suggest that management might apply this same standard of quality in other directions.

Role of SBA

SBA services have not been used in the past by this company. The owner of the firm is generally familiar with the SBA loan services and feels that this aspect of SBA is very worthwhile if used with discretion.

Summary

The potential of this company should be good. It built its reputation on quality and craftsmanship. These are invaluable assets. But modern marketing requirements may make it necessary for the company to reevaluate its marketing program and to consider the addition of new products. In this situation, it would seem appropriate that the company make maximum use of its reputation in sales promotion. Although the mass market is not always quality conscious, there should be excellent promotional possibilities in the "years of craftsmanship" approach.

Exhibit J

CASE STUDY ABSTRACT (Company #10)

Background

This company is a manufacturer of small, decorative wooden and floral products for homes and commercial establishments. Located in a small town, the firm is the outgrowth of another company which was bought by the present owners less than 10 years ago.

The company presently employs approximately 10 workers, most of whom are production employees. The products of the company are sold through agents and jobbers to gift shops, department, furniture, and variety stores, and to some extent directly to institutions, hotels, and motels. Distribution is widespread in the Southwest, Southeast, and Midwest. Manufacturing methods are uncomplicated; most of the production work is manual requiring in some cases a relatively high degree of dexterity. Financial management controls are simple but effective. Costs are projected for each item in terms of material, labor, shipping, and selling expenses. Raw materials are available in abundant supply, largely from local sources. Inventory controls are at a minimum; production is flexible, and seasonal demands are usually anticipated well in advance. In regard to capital requirements, working capital is the most critical factor. The company is in an unusual competitive position. Not only does it compete with other companies making the same type of product, but it also must compete with companies making any type of wall decoration.

In considering the operations of the company, it is important to recognize that the specialty products involved create some unique marketing problems. In addition, the company is far removed from its marketing areas.

Problems and Needs

General Management

The president recognizes that inexperienced management was one of the most critical problems during the early days. With no previous experience in manufacturing, the management had to learn, often through trial and error,

the intricacies of production planning, costing and pricing, purchasing, sales promotion and distribution, and the many other necessary functions of a manufacturing operation, regardless of size. Many of these deficiencies have been overcome through experience and self-study.

Financial Management

The quality of accounts receivable presented a particularly serious problem when the company was first purchased. The customers for the company's original product were frequently marginal risks. Management wisely chose to diversify the product line to include items which could be distributed through more reliable outlets. Although some accounts receivable difficulties still exist, bad debt losses have been cut considerably and collection of accounts is no longer as critical a problem.

Sales

Sales promotion and distribution has been and will continue to be the problem of most concern to the president. As in the case with many small companies, the firm is not large enough to develop its own sales force, and commission salesmen who will diligently promote the company's products are difficult to find.

Production capabilities are now sufficient to satisfy a much greater output with a minimum of capital investment in additional facilities. Although a more detailed study would be required to determine the most effective means of meeting the sales promotion problem, certain general observations may be made. Because of the uniqueness of the principal product (an exclusive decorative item), it is likely that promotional efforts would be more successful if aimed directly at the consumer rather than at retail buyers. Buyers are generally reluctant to purchase a new product until the demand is fairly certain, and it is often necessary for the manufacturer to stimulate this demand at the consumer level. Another factor to be considered is the recent growth in the number of gift shops being established in suburban shopping centers. The possibilities of these new outlets deserve further study.

Role of SBA

The president of the company is familiar with the publications of SBA and has read a number of them. He is familiar with SBA's management conferences and with the "set-aside" program for small business on dealing with the government. In his opinion, the publications tend to be too general in nature to be of help with his somewhat unique production and marketing problems.

Summary

Although the importance of other products should not be overlooked, the company's most unique product is a decorative item which seems to have very good possibilities. Apparently the market for this type of product has been barely touched. To capitalize on the competitive advantage of a unique product, however, the company must aggressively promote the item before other manufacturers make a serious bid for the market.

Obviously, sales promotion would not solve all of the company's problems. Although the company has the production capacity for a greater volume, really efficient production would be difficult in the present layout. Ideally, a full production line housed in one building would be required for substantial production operations.

The future of the company should not be viewed entirely in terms of obstacles to be overcome. The firm has a number of very valuable assets: an original and unique product line, an established name in the field, management that has matured through experience, and ample nearby sources of raw materials. Future developments, therefore, depend not only on the effective solution of sales and space problems, but also on the optimum utilization of existing assets.

Exhibit K

CASE STUDY ABSTRACT (Company #11)

Background

This company was first organized less than 10 years ago in one of the major metropolitan areas of the State. The company was formed as a manufacturer's agency, representing a group of firms which produced small items for building and supply houses, retail hardware outlets, etc. Within a few years after its founding, the company was confronted with a major change in marketing practices. Many manufacturers in their line began selling direct to retailers, by-passing the distributors and agents. Faced with such competition, the owner of the company organized a manufacturing operation to produce his own products and attempt to retain his existing customers.

The company is incorporated and closely held. It currently employs less than 25 workers. Its products are small items, used by contractors, homeowners, and building and supply groups. About 75% of sales are within the South. Customers are largely retailers with only a limited number of jobbers. Manufacturing facilities are apparently adequate, and quality control standards are high. Cost controls appear to be reliable. Standard costs have been developed for each product item, and they are balanced against a periodic analysis of actual expenses. Some purchasing problems are encountered. Local sources are reportedly unreliable and the quality of their materials is alleged to be unsatisfactory. Inventory controls appear to be a major problem; high inventory balances seem to develop before management is aware of it, and this situation creates wide fluctuations in production scheduling.

Problems and Needs

Organization

The most striking fact about this company is the urgent need for delegation of some of the president's responsibilities. In addition to his responsibilities for general management, the president acts as sales manager, supervises overall plant operations, and is seemingly concerned with the

most trivial operating details. There is an obvious overload of work concentrated on this one office. This situation is, in one sense, the root of the company's problem; in another sense, it is the result.

Company management reports unusual difficulty in recruiting second-line management personnel. Presumably, if such personnel were on hand, some of these organizational problems could be resolved. However, there is some question in regard to the approach used by management in attempting to recruit capable candidates. Management has shown an interesting reaction to its business environment. The lack of applicant interest in this company is attributed to a lack of capable people in the area. While there is an apparent shortage of attractive management candidates, this attitude of the company carries over into other fields. Too many of the company's problems are attributed to the local business environment and to such factors as low employee productivity, high absenteeism and turnover, poor morale, etc. This approach implies an absence of the "self-searching" for faults which is important to every administrator. Instead of reviewing the policies and practices of the company, there is here a tendency to blame the company's problems entirely on external factors.

Personnel

In swift order, the president describes his personnel problems as including very poor productivity, high absenteeism and turnover, low employee morale, low employee skills, and unusual training needs. It is difficult to determine just where to begin in analyzing the personnel needs of the company. It seems likely that they probably stem from low wage rates and wide fluctuations in production. The combination of low pay scales and frequent layoffs is almost certain to attract only the poorest quality labor. In turn, this class creates the greatest problem in productivity and in training. Incentives reportedly do not work well. It seems unlikely that poor quality labor, with doubtful aptitude and job interest, could result in anything else.

In addition to these situations, one very important factor must be added. Most of the company's workers are female. Employee relations as practiced in other sections of the country are frequently in sharp contrast with the backgrounds and sentiments of southern workers. In this case, there is some evidence to indicate a lack of understanding and sensitivity to this difference.

Sales

The development of a strong sales effort is always a primary consideration. Equally important is the planning of new products and promotional programs which are needed to insure long-term development.

In this situation, there is a major need for diversification. The company's products are traditional ones whose sales prominence is gradually being overshadowed by more modern devices and refinements. There is also a need for study of new packaging methods and promotional techniques.

Financial Management

Although cost controls seem to be reliable, current cost figures seem unnecessarily high. Management attributes this to the low productivity of the employees. Productivity is considered to be much lower than that of eastern competitors. "Our cost, even at lower pay rates, is higher because production rates are much lower than in New York, etc."

Purchasing

Almost no raw materials are bought locally. Management reports that local sources are unreliable and that the quality of their material is poor. Although this is possible, it is somewhat difficult to accept as a completely accurate statement.

Manufacturing

Planning and scheduling appear to be poorly managed. The company recently found itself with a heavy inventory of finished products on hand. The plant closed down until this inventory could be sold off. Workers were released, with the likelihood of subsequent loss in whatever skills had been developed.

Role of SBA

The president had not heard of any of the services of SBA. In this situation, the publications of SBA and management training conferences would be of particular value. There is a genuine need for some realistic changes in management's policies and procedures.

Summary

The company should have good potential if management is willing to recognize the need for a change in approach. In an effort to get cheap labor, management has succeeded only in getting the most expensive kind: the untrained, unreliable worker whose aptitudes are limited. The company has a good quality product sold in a relatively specialized field. There is relatively little local manufacturing competition. The attraction of supervisory talent and of a better standard of production workers is not impossible. It represents an investment in skill, without which the company cannot economically operate.

Exhibit L

CASE STUDY ABSTRACT (Company #12)

Background

This company is located in a medium-sized town in one of the State's major farming areas. Organized over 25 years ago, the firm has become a substantial manufacturer of chemical fertilizer and has broadened its services to include cotton ginning and warehousing.

The company was originally formed as a proprietorship. It was incorporated in recent years and its functions were divided into two separate operations: fertilizer manufacturing and ginning and warehousing.

The company now employs between 10 and 15 workers, most of whom are recruited from among the many farm workers in the area. The chief products are chemical fertilizer compounds. All output is sold within the county and most within a 10-mile radius of the plant. The largest percentage of sales is made over the counter, but an increasing effort is being made in outside sales. The planning and scheduling of fertilizer production is made on the basis of past experience records plus the advice and assistance of the Agricultural Extension Service as to planned fertilizer recommendations. Facilities and equipment appear to be satisfactory. A number of handling systems have been installed by the president, and overall manufacturing methods appear to be good. Financial management methods are simple but effective. Cost accounting is based on an estimate of overhead costs which, prorated against product volume, is added to product material costs. The company's capital position is very good. Management has been conservative in its approach to expansion. Competition is severe. The small local competitors are factors to be considered, but the competition of the large national firms and especially of the cooperatives is the most serious.

The company's operations are of particular interest for several reasons. First, it operates in an agricultural environment, and its success depends upon the farm economy which surrounds it. Second, the present management of the company has shown unusual foresight in adapting very practical, but uncomplicated, management and production methods to an older business. Unlike

some firms of its age, there is a degree of vitality about this company that is reflected in several phases of its operation. The application of well-planned materials handling devices, the physical arrangement and types of mixing equipment, and the simple but reliable office methods are of particular importance. Third, the present management of the company has shown a continuing interest in scientific farming developments and has shaped its own services to keep pace with these changes. Finally, customer relationships are unusually close. Almost all customers are individual farmers, with little or no commercial contracts. The traditional practice of financing a farmer's needs for seed and fertilizer is still a standard practice.

Problems and Needs

Organization

The management of the company is concentrated at the top. Planning, coordinating, and decision-making functions are centered largely in the hands of the president with the advice of the secretary-treasurer. The most important long-range need is the requirement for developing a reserve of management talent to round out the future organizational needs of the company.

Personnel

It has been recommended that the company undertake an early program for the training of a young management candidate. He should be oriented in all phases of the operation. Present management is sensitive to this need. There are no personnel problems in the company which approach this one. Without the development of a reserve of management skill, the company's other future needs may be academic.

Sales

The company has been faced with a continuing problem in planning its program to offset the competition of the large companies and the cooperatives. The large companies present particular problems. Although their policies require that their products be sold only through dealers, dealerships are reportedly available to anyone, including individual farmers. The cooperatives enjoy unique advantages. A favorable tax situation makes it possible for the group to hold prices to a minimum. In addition, the cooperative profits can be reinvested in machinery and equipment with additional advantages in cost saving. For the smaller manufacturer, it is

difficult to manage the same degree of reinvestment after taxes.

The company's answer to this competition has been to develop good service policies. This practice has been successful in the past. It will continue to be a prime sales point unless the tax benefits of the cooperatives finally make it impossible for an independent company to compete.

Manufacturing

The primary problems of manufacturing which now confront the company include the following:

1. The need for design of equipment for aerating fertilizer in storage.
2. The need for less expensive fertilizer granulating equipment.
3. The need for general research and development in chemical fertilizers.

One of the problems now encountered in the production of fertilizer is the chemical reversion which acts on some of the chemicals. This can become a serious problem when a reversion occurs which changes the fertilizer's properties significantly.

Fertilizer granulating equipment has been introduced only in recent years. In order to install such a system, the investment requirements would be several times what the existing plant is worth. The process is highly desirable, but at present costs only the larger companies and the cooperatives can afford it.

Many public and private groups are active in research and development on new chemical fertilizer compounds. The Agricultural Extension Service and certain chemical companies have already made notable progress in this field. It is important to this company to keep abreast of new developments if it is to compete successfully.

Financial Management

The company's accounting controls are well designed for the firm's needs. Too many companies establish systems at one or the other end of the extreme: the system is either lacking in consideration of all necessary data, or it is too complex to administer effectively in a small operation.

The primary problem of financial management is related to accounts receivable. The type of customer served and the frequent requirement for financing seed and fertilizer until harvest have some hazards. In many cases, the only security an individual can offer is as a moral risk. Unfortunately, the company must share the consequences of a crop failure. The net result is that the company may have to carry an account into one or more seasons in order to recover the money advanced.

Role of SBA

The president of the company was not familiar with any of SBA's services except the financial service program. The company has not had occasion to require SBA's assistance in this area.

Summary

The company is a very well managed business. The president has shown unusual foresight in taking the right action at the right time--he has a good "feel" for the business. Management is also unusual in the sense that it has shown an awareness of the need for change in an industry where policies and practices have strong roots in the past.

The company's success depends upon the success of its customers, the farmers. The success of the farmer depends, in turn, upon a number of factors, not the least of which is our national policy in the handling of surpluses and agricultural lands. In addition, there is the role of the cooperatives, another aspect of our national policy.

In considering these factors, the future of the company seems to hinge on two key requirements: the continuation of good management and the need for continued development of production methods which minimize costs. The company has been fortunate in the past in having an excellent location, thoughtful management, a wise and conservative approach to the use of capital, and that essential ingredient--a great deal of hard work.

Exhibit M

CASE STUDY ABSTRACT (Company #13)

Background

This company is located in a rural area in the southern part of the State. The firm, a part of the wood products industry, consists of a saw mill, planing mill and dry kiln.

The company was formed less than 15 years ago. It has experienced substantial growth during this time, and its products are now distributed in an unusually large area. The company is incorporated and managed by one of the joint owners.

The firm employs between 40 and 50 workers, some of whom live in low-rent quarters provided on the plant site. Company products include kiln-dried and planed boards, framing, and small dimension timbers. The sales area covers a 250-mile radius of the plant. Most sales are to lumber yards, building supply dealers, and contractors. A relatively large volume of sales is made to contractors who find the company a source of special needs, such as extra long beams. Manufacturing planning and scheduling is done by the president on the basis of incoming orders. Production backlogs are not unusual; a backlog of some 250,000 feet exists currently. Facilities and equipment appear to be satisfactory. Quality control standards are very high. Accounting methods and cost controls are superior to those of many small companies. Purchasing of raw timber has been and will continue to be a major problem due to local competition from pulp and paper mills.

One of the most striking things about this operation is the sensitive management applied to a traditionally rural industry. The president has demonstrated an unusual grasp of detail in the administrative controls required. He has shown particular ingenuity in plant engineering, and his approach to the conservation of capital resources has been an important factor in the success of the company.

Problems and Needs

Personnel

Unskilled labor is in short supply in the immediate area, but ample reserves are available a short distance away. One of the major problems has been in finding, in this rural area, sufficient numbers of skilled workers to meet the growing requirements of newer and more complicated equipment.

On-the-job training is hindered by the pressure of day-by-day operating requirements. However, it appears that this is the only solution which can guarantee the company a reserve of skilled labor.

Absenteeism is particularly bad among the unskilled workers. The quality of the unskilled labor is poor. Many workers apparently work only as long as it meets their immediate needs, and then they drop out until they need to work again. The company operates on a tight man-to-machine ratio, and when the supporting unskilled workers drop out unexpectedly, some frustrating production problems develop.

Manufacturing

The president has shown a great deal of ingenuity in laying out the plant, in his adaptation of equipment for multiple purposes, and in the installation of labor-saving devices. Fork lifts have improved the handling of logs, and a well-planned conveyor system has paid off by reducing handling costs even further. In four years, manpower requirements have been reduced by about one-third and production has been improved.

These changes have been spurred on by the rising costs of timber. Timber prices have increased substantially. Without a reduction in processing costs, profit margins would be at a minimum, with little income available for reinvestment.

Financial Management

A major consideration in the financial management of the company has been the planning of capital investment. The president has shown a thoughtful approach to this problem. Recognizing the value of labor-saving devices in general, he has been careful to evaluate the particular value of specific

systems in regard to original cost, potential savings, depreciation rates, etc. The president points out that modernization should have begun much sooner; it is now an expensive improvement. Savings from new equipment systems have just about balanced out the increases in costs of raw materials. Operating costs are high and by-products are sold wherever possible. Financial planning will continue to be one of the major problems in balancing material costs against production savings.

Sales

Perhaps the most important factor to be considered in the sales area is the prospect of diversification. Wood preserving, the manufacture of wood pallets, etc., are possible fields. It would be highly desirable if a new product line could be developed which would permit the use of culls. For example, pallet construction would not require top-grade lumber, which in turn might help to ease some of the problems in purchasing good grade timber.

Purchasing

As indicated earlier, the competition of pulp and paper mills has priced timber stands beyond normal levels. The location of the plant places it at a disadvantage in this respect.

When the company was organized, it was not necessary to buy up timberlands to insure a reliable source of supply. Since that time timber procurement has become increasingly difficult. A vice-president of the firm now handles most such procurement. The company once experienced substantial losses through the inaccurate cruises of an inexperienced forester. What the company needs now is a consistent supply of timber at reasonable prices. In this particular situation, considering the large requirements of pulp mills, it seems likely that the company will have to continue to develop its own timber tracts as a basic source of supply.

Role of SBA

The president feels that SBA's most appropriate role is assisting small business to meet its capital needs. This particular company has handled its own capital development wisely. In regard to specific services suitable in

this situation, SBA's technical services would be of value in providing engineering advice on specialized problems. The president knew of the existence of SBA's publications but had not had occasion to use them.

Summary

The emphasis on cost controls and the careful planning of capital expenditures have been important factors in the success of the company. In addition, the firm has developed a reputation for a high standard of quality and as a source of special-cut lumber supplies. This has made it a frequent supplier of lumber needs for architects and builders.

The company's continued growth will depend on its success in developing adequate raw material sources and on the balancing of process cost savings against increases in raw material costs. Marketing does not appear to be a major problem. Maintaining an acceptable profit spread will be the primary need.

Exhibit N

CASE STUDY ABSTRACT
(Company #14)

Background

This small manufacturer of bedding and upholstered furniture is located in a medium-sized town. The company is owned and operated by members of a family who also operate several furniture stores.

The manufacturing phase of the operation is less than 10 years old. It has developed somewhat slowly. The products were first sold only through the family's own trade outlets, but the market has now been extended to other customers.

Although the details of this study are concerned primarily with the manufacturing company, reference must be made to the furniture outlets because of their interrelationship. The president of the furniture store chain also serves as president of the manufacturing company. While all corporate officers share in major policy decisions, one officer has particular responsibility for planning and directing the work of the manufacturing company.

The company currently manufactures sofa beds, club chairs, living room suites, lounges, mattresses, box springs, and head boards. Employment ranges from 10 to 25 workers, depending upon the production load. About 75 per cent of production goes through the family-held retail outlets. The sales area is largely confined to Georgia with some overlapping into a neighboring state. Although most output goes through furniture stores, a limited amount has been sold to mobile home manufacturers.

The company does not use a formal cost accounting system in its financial management. Costs are apparently calculated by analyzing accounts payable. Purchasing requirements are important. The company uses a variety of materials, some of which come from within the State, some from bordering areas, and part from New England. Inventory control is based on anticipated demand and past experience. Working capital requirements are relatively high due to the cost of raw materials and the traditional slowness of accounts receivable.

In regard to competition, the industry is composed of many large and small manufacturers that offer similar products. The greatest competition seems to come from the smaller manufacturer who produces lower quality products and cuts prices to a bare margin. However, the national companies have the advantage of large-scale advertising programs and strong consumer identification in the markets.

In considering the overall operations of the company, the most important factor to be considered is the influence of the family-held retail outlets. This naturally shapes the company's thinking in its marketing efforts. Secondly, the nature of the industry is in itself a factor. Unlike some industries, it is difficult for a company to devise a sofa bed or a mattress which is unique enough to warrant a special market. Finally, the manufacturing operation was established originally to serve the family-owned outlets. Management was inexperienced in manufacturing and has had to develop the controls and methods required through experience.

Problems and Needs

Organization and Planning

A problem that has confronted the company throughout its growth has been the basic policy question of how fast the company should attempt to expand. Disagreement on this question led at one time to a split-up in the management of the company. No doubt it also contributed to the purchase of equipment which could be justified only in the light of considerable expansion.

As indicated earlier, management was originally inexperienced in manufacturing operations. This probably contributed to the planning problems.

In reviewing the needs for organization and planning, it would be wise for management to evaluate carefully its market potential and to make a reasonably strong statement of its future plans. If the company is to share its production with both family-owned outlets and other customers, its manufacturing and marketing efforts should be planned well in advance and after consideration of just what the market will stand.

Personnel

The most critical current need is the requirement for qualified personnel who are trained or can be trained as upholsterers, frame builders, and maintenance mechanics. The manager of the company feels that the area needs a vocational training school for some of these trades. He also suggests that it would be helpful if some means were devised for trade schools to notify employers of the type and number of trained graduates available for employment.

Sales

In the same sense of planning overall company expansion, a major current need of the company is the matter of determining the proper balance of quality and variety in the product line. Through experience it was found that quality of construction had to be improved and that a greater variety of products had to be offered if the company was to compete successfully. Although there is no direct evidence that it is true with this company, some manufacturers have found that problems also arise at the other extreme of this question: if quality is too high and the product line too varied, increased manufacturing costs can prohibit competition in that price segment of the market which the company is best suited to serve. Ideally, a company should seek optimum quality and variety rather than maximum quality and variety. Optimum quality and variety should be determined in terms of the characteristics of the company's most appropriate market.

Manufacturing

Closely related to the sales question is the matter of best utilization of manufacturing facilities. Sales should be increased substantially if existing equipment systems are to be utilized efficiently. The company, by many standards, is "over-equipped" for its volume. In addition to this basic problem, the manager lists other problems in the areas of production methods, scheduling, quality control, raw materials supply, and equipment maintenance.

Financial Management

Considering the investment involved in manufacturing facilities, it would appear to be of particular importance to refine cost controls. The development of more specific cost analyses would pinpoint the more costly areas. Not only would this be of value in determining better realignment of

production methods, it would also be of specific value in calculating contract bids.

Role of SBA

The manager of the company has used SBA management and technical publications and assistance services, but he has found these services to be of little help in his specific situation. He is familiar with SBA reference libraries, management courses, etc., but he has not availed himself of these services.

From his experience with SBA, the manager feels that SBA's services are designed for such general application that they have benefited no one in particular. A better approach he feels would be to provide some type of specialized assistance for the major industries.

The manager also feels that SBA could serve a useful function as a clearinghouse for information of interest to each industry. He proposes that SBA develop a digest and reference system and issue bulletins periodically by industry or area of interest so that each small businessman could identify quickly those sources of information which are of particular value.

Summary

The future of the company depends on the success with which sales can be expanded through outlets other than the family-held stores. Broadening of the market was recently begun with an agreement with a large distributor to handle the line in a new market area. Increased sales would make possible a more efficient utilization of equipment and space but would intensify the need for qualified production employees.

As a part of a large and highly competitive industry, the company must capitalize on every possible competitive advantage. The identification and evaluation of these advantages would require a considerably more detailed study. However, the company is located in an area where a new market is developing. To meet price competition in this market, the company may find it necessary to lower its quality standards. This requirement should be weighed against the premise that quality is an admirable--but sometimes uneconomic--virtue.

Exhibit O

CASE STUDY ABSTRACT (Company #15)

Background

This firm is a part of the general food industry. Located in a small town, the company was organized less than 20 years ago as a partnership. It has since been incorporated and has grown substantially, especially during the last five years when sales volume has doubled.

The company organization is relatively elaborate, with a well-defined distribution of responsibility. An executive committee reviews problems and makes recommendations on major policy changes to the board of directors. Employment varies between 150 and 250 workers, reaching the peak during the height of the processing season. The product line consists of processed fruits and vegetables, about 80 per cent of which is sold under the company label. The market area is largely east of the Mississippi and extends from Florida to Maryland. Brokers are used in the larger trading areas, and the sales manager spends most of his time in sales promotion.

Manufacturing facilities appear to be good. Production is now 30 times the original volume of the plant. The company's financial controls are effective, including refined controls in cost accounting and budgeting. Purchasing presents some problems on occasion. Raw produce is bought largely within a radius of 100 miles from the plant, except when crops are disappointing. Unpredictable changes in supply necessitate going outside this area. In considering the overall competitive atmosphere, the strongest factor is the small processor and, to a lesser extent, the national firms.

None of the founders of this company had had experience in this type of operation. However, the industry was young at the time, and the ability to learn new processes and devise new methods was of more importance than experience in old systems. The company's marketing efforts have been wisely planned. Although some of its products are sold under private label, the company has established its identity on the consumer market.

Problems and Needs

Manufacturing

The most significant manufacturing problem appears to be keeping pace with the rapid technological changes in the industry and the demands for increasing volume. Materials handling systems have been improved with straddle-type lifts, and packaging problems have been solved in part with polyethelene bags. New machines and equipment are continually being developed for the improvement of handling and packaging of foods. In order to compete successfully, management must recognize and take advantage of every appropriate labor-saving device.

Purchasing

The unpredictable supply of raw produce creates problems by requiring abrupt changes in purchasing sources. It also creates expensive idle time in the plant.

In estimating the amount of acreage to be planted in the spring, an attempt is made to determine by March the requirements of the private label companies. Planting and cutting must be scheduled over a three- to four-week period to make optimum use of farm labor and machinery and to prevent harvested crops from being brought into the plant at one time. Most raw produce will spoil if not processed within 24 hours after cutting.

Cotton picking overlaps the harvesting of some crops and aggravates the shortage of farm labor. This problem is being partly met by the increasing use of farm machinery. Regardless of the experience of procurement personnel, so many unpredictable factors govern crop production that planting estimates can easily be inaccurate in both directions. When an excess is purchased under contracts, it is usually processed and disposed of in large lots at reduced prices. When requirements have been underestimated or crop yields have been disappointing, produce may be purchased from out-of-state sources. Since some farms in other areas are producing greater volume per grower, the costs of transportation are partly offset by lower prices.

Role of SBA

Several SBA publications have been used and found fairly helpful. An SBA counselor made a one-day visit to the plant. A vice-president of the firm has stated that it would be most helpful to have an SBA engineer visit the plant for a sufficient period of time to analyze and make recommendations on major problems.

Summary

This company's success can be attributed to the careful planning that preceded its initial venture and each step in its development. Admittedly, at the beginning there was no reserve of experience in this field. However, like some other very successful companies, management showed a willingness to seek out new methods aggressively. In addition, this was a new industry. Management chose an opportune time to enter the field.

The management of the company now feels that its future success will depend, at least in part, on the availability of capital for new equipment, the addition of new lines, and the promotion of sales. The company's past experience should be an asset in seeking new capital sources and in overcoming other problems of development.

Exhibit P

CASE STUDY ABSTRACT (Company #16)

Background

This company, a part of the fabricated metal products industry, is located in one of the major metropolitan areas of the State. The company is relatively young and its growth has been noteworthy in several respects.

The company was incorporated from its beginning approximately 15 years ago. Starting with minimum capital and facilities, the owner has developed substantial manufacturing and sales operations. The firm now employs approximately 100 workers, about 75 of whom are production employees. The organization of the company is well planned and much more sophisticated than normally found in firms of this size. The company's product line is one of steel products manufactured largely for commercial use. In the past, distribution has been directed primarily through the outlets of another company whose marketing program was well established. Only about 25 per cent was sold through the company's small sales force. This arrangement is now being changed, and the company is planning to enlarge its own sales program.

Manufacturing facilities are good. The process itself is uncomplicated by most standards. Some bottlenecks exist, largely through the limitations on capacity of certain equipment. The financial management program of the company is well designed and carefully administered. In recent years, the company has been able to operate within 10 per cent of its budgeted figures. Purchasing efficiency is extremely important in this business. The company takes mill prices and, whenever possible, company trucks returning from deliveries are routed back by the mills for savings in transportation costs. Inventory control is simple but efficient. The company has been characterized by a highly conservative approach to capitalization. Although it has been considered undercapitalized, the firm has shown a much sounder approach to expansion because of its self-imposed limitations.

In viewing the overall operations of the company, several points should be emphasized. First, this particular phase of the industry is relatively new. Second, the company had an initial advantage in the use of the marketing outlets of an established company. Finally, the company's growth has

been guided almost exclusively by a "textbook" approach to management.

Problems and Needs

Personnel

The scarcity of skilled workers has been and will continue to be a major problem. Vocational training facilities do not provide sufficient quantities of trained men locally, and in some cases the company has had to send its employees to out-of-state schools for special training. The lack of well-trained workers creates problems in recruitment and in maintaining a high standard of productivity. Local vocational schools do not train certified welders, for example. Draftsmen are in short supply. This situation points up again the need for a review of the overall vocational training program within the State.

There is also a serious need for a supervisory training program in the area. It is not possible to send supervisors away for training because of the operating demands of the company. This is an area in which the SBA might well assist the community by organizing and presenting a series of supervisory workshops.

While employee relations are considered generally good, there have been several incidents which created some unrest. Several efforts at organization by one of the major unions failed. Unable to gain entrance into the plant by election, the union allegedly chose to charge the company with a series of unfair labor practices. Although the NLRB finally held in the company's favor, management feels that the series of incidents were unfortunate. Management has since sponsored a labor relations course for all its supervisors. An attractive lunchroom has been built, recreational and safety movies are shown each week, and a company newspaper has been started. Management is making a conscious effort to improve communications with employees. This approach is to the company's credit.

Sales

Some five years ago the company formed a distribution alliance with another manufacturer. The company designed and produced the units which were sold through the older company's large network of dealers. About this same time an agreement was reached with a national mail-order house for the

production of other units. The company's growth was greatly stimulated with these outlets, but the arrangements had the disadvantage of limiting the company's identification in the market.

In recent months the company has determined to terminate the major marketing alliance and to organize its own sales effort in the southern states. The most immediate and important problem facing the company is this venture. As management recognizes, this is an acid test. The company is embarking into full-fledged competition with national manufacturers in a highly competitive market. Detailed plans have been made for sales promotion, dealer development, etc., and management is aware of the hazards involved. However, this is a step that must be taken at some stage if the company is to continue its logical growth. Independent marketing will permit greater flexibility in sales development, assure closer controls, and establish a market identification of the company and its products.

Manufacturing

The engineering and design of new products is a special problem for small manufacturers who cannot support full-time specialists. This company used part-time engineering assistance for several years. As sales grew, several full-time engineers were added to the staff. As design requirements became more specialized and demanding, an outside consultant was retained for the design of new units. It was through the wise use of its own staff and of outside assistance that the firm developed a product line unusual in its flexibility and variety of application.

Community Cooperation

A problem not related to internal operations but significant for its effect on a small company is the lack of community cooperation experienced by this company. Specifically, the local city commission seems to have shown little interest in providing even the more routine road work, water, and sewage services. This is a situation which smaller home-grown firms frequently experience while some communities seem willing to make almost any concession to the large company considering the establishment of a branch plant.

Government Regulations

Management of the company expressed some interesting ideas regarding government regulations: government regulation of business often seems to be geared to large operations, making it difficult for the small company to afford the legal counsel, record-keeping systems, etc., necessary for compliance with the law. Paradoxically, anti-trust laws sometimes work against small business. A large company may be prevented from buying control of a small company even if the small company wants to sell. An unfortunate alternative is then created: if the large company chooses to, it can establish a branch plant in the area and undersell the smaller company until it has captured the market. In this situation, the smaller firm suffers most severely.

Role of SBA

SBA assistance has not been requested on any of the company's past problems. Management Aids are received and read, but they have reportedly not been as useful as have private publications from the American Management Association and other private groups.

The president takes a thoughtful approach in considering the appropriate role of SBA:

1. SBA should enlarge its general management education program through extension courses, more management conferences, etc. These should be done at the local level where possible to permit sizeable groups of management personnel to benefit from the courses without being away from their jobs.
2. Technical assistance is not feasible as an SBA service. Technical problems are too varied, and it is recognized that SBA has practical limitations on its staff services. SBA services should be those which meet the most common needs of small businessmen.
3. SBA's financial assistance contribution would be more meaningful if it concentrated on providing information and advice on the advantages and disadvantages of various types of financing and on methods of pursuing each type.
4. The greatest contribution SBA could make is in helping small business help itself--not by doing the work for small business, but by creating an environment in which small companies can grow and prosper. In this regard, SBA should reemphasize its role as liaison between small business and government--in protecting the

rights of small business, interpreting regulations, policing set-asides on government contracts, and interpreting the practical needs of small businessmen in regard to proposed legislation.

Summary

Management foresees a sound future for the company. An excellent market exists, and management has demonstrated an unusual skill in planning and administering the company's operations. The company is a noteworthy example of good business practice in several respects:

1. The newness of the industry created some problems in the development of management methods, but it also permitted management to operate in an atmosphere unrestricted by long-established attitudes and techniques.
2. Management made wise use of consultants, recognizing that such specialists can sometimes provide economical sources of highly needed skills.
3. The president has shown a willingness to manage, by delegating to his department heads the responsibility to act with considerable freedom and flexibility.
4. Planning, decision-making, and coordinating actions are taken at weekly staff meetings of key personnel. This permits a healthy interchange of ideas and insures against unilateral action and sometimes arbitrary decisions not uncommon in many businesses.
5. Communications are superior to those found in many organizations. Policies and procedures are published (and observed); staff meetings facilitate the exchange of information; and employees are well informed of company operations and plans through bulletin board notices and the company newspaper.
6. Management has recognized the importance of establishing a well-rounded board of directors. Included on the board are the company's accountant, its legal counsel, and its banker. There is a possibility that the advertising representative may be added to the board later.

With this approach to overall management, and assuming an imaginative and aggressive approach to its new marketing effort, there is little doubt that the company can successfully compete within the limits of its capacity.

Exhibit Q

CASE STUDY ABSTRACT (Company #17)

Background

This company was organized approximately five years ago to provide special yarn processing services for a part of the textile industry. Located in a medium-sized town, the organization is actually composed of two separate functions: the yarn processing operation and a supply company for distributing threads, tapes, and other tufting supplies.

The owner of the firm has had considerable experience in the textile industry. Early in the 1950's, he investigated the possibility of establishing his own business. Several years later he bought out a defunct supply company and started purchasing, warehousing and selling supplies to the tufting industry and handcraft items to consumers by direct mail. The manufacturing operation grew out of an anticipated demand for special processing of certain yarns used in the industry.

For about six months the plant operated profitably on an around-the-clock basis. However, business dropped off sharply after the initial surge. Demand was down, and one of the company's largest customers found that it could handle the operation within its own plant. Since that time processing work has been sporadic and generally unprofitable.

The company employs four production workers and two office employees. The sales staff is composed of the owner and one full-time salesman. Basically, the company sells a service in promoting its manufacturing operation. Yarns are processed on a fee basis for the company customer. Most such work is done for companies within the commuting area. Plant facilities are adequate. The owner has shown considerable ingenuity in developing innovations to increase the efficiency of the machinery, to decrease maintenance costs, and to provide effective safety devices.

Detailed accounting records are maintained by an officer of the company. A formal cost accounting system, however, is not considered feasible. From a capital standpoint, the company has benefited from its use of used and rebuilt equipment. However, the company is obviously undercapitalized, and the owners must sometimes rely on their personal credit in order to obtain short-term operating funds.

Problems and Needs

Personnel

Because of the limited number of production workers required, the company has had no particular difficulty in finding qualified employees. If a number of employees were required, however, it is possible that an acute problem would develop. The president feels that small employers must choose from applicants who have been rejected by the large manufacturing firms in the area.

Sales

Most of the problems in the past have been related to the erratic demand for the company's processing services. Continuous production has not been possible, and the operation has been profitable only during peak-load periods. If a demand exists which is sufficient to support a company of this type, then the firm's basic problem is one of sales promotion. If, on the other hand, the demand is neither great nor consistent enough to support one company, then the company's basic problem is one of diversification or redirection.

The primary need now is for a realistic market appraisal to determine whether or not the manufacturing operation should be continued. If market potential is found, then intensive promotion is indicated. If the demand does not exist, management must determine if manufacturing operations should be redirected or discontinued entirely.

Capital Requirements

Capital requirements for starting the manufacturing business were relatively low since it was possible to buy and rebuild used machinery. However, expansion of operations into the next step of yarn processing would require a considerable outlay of capital for equipment. For example, attachments to present machinery for performing a special process for which there is a known demand would cost approximately \$75,000.

Competition

The processing service offered by the company is unique in that there are few, if any, competitors that perform the same operations exclusively. These operations are generally performed as part of the yarn preparation process by large manufacturers or, in some cases, by tufters prior to the tufting process.

The fact that the company has no direct competition from other companies of its kind is not as advantageous as it may appear. Rather, it is likely that the demand for the process, outside of that performed as part of the yarn preparation or tufting operations, is not great enough to attract other firms into the field. In fact, there is some question as to whether or not the demand is great enough to support this one company on a full-time basis.

Government Relations

Since this is a relatively new business, the president is still acutely aware of the difficulties involved in satisfying the requirements of federal, state and local governments for maintaining records of and reporting information relating to sales tax, income tax, social security, etc. The problem is not just one of record-keeping, but of knowing what forms must be prepared, what records must be kept, etc.

Role of SBA

The president of the company has not had the occasion to use any of the services of the Small Business Administration. Although he has some general knowledge of SBA loan policies, he was not familiar with the management and technical assistance program.

The president feels that the SBA could serve small businesses by assisting new companies in setting up and maintaining records and reports required by government agencies. Specifically, he suggests the development of a handbook which would list and explain all forms and regulations relating to the establishment and operation of a business with eight or more employees. This, he feels, would eliminate the necessity for hiring outside accounting and legal assistance at the time when the new management needs to conserve capital to the fullest extent.

Summary

The immediate future of the manufacturing company depends on the possibility of securing commission jobs for processing certain new synthetic materials. Because of the present demand for this material, the company hopes to secure some of the work available from the larger mills that may be overloaded in their own facilities. The permanency of this business is doubtful, however. If such processing requirements continue, it is likely that the larger companies will expand their own facilities rather than continue to subcontract the work.

The company has a number of valuable assets which should be considered in evaluating its future. The officers of the company have experience and good contacts in the industry and have demonstrated managerial ability in operating and developing the supply company. The supply company itself is a definite asset. In addition to supporting the manufacturing company during slack periods, the company provides a ready-made distribution outlet for possible future manufacturing ventures. The plant site is well located and buildings are being developed which will serve either for manufacturing activities or for warehouse space.

By far the greatest liability is the inconsistency of the demand for the manufacturing company's processing services. The company was organized to meet a demand that proved to be temporary, and management efforts since that time have not been able to overcome this handicap. Unfortunately, the machinery which the company owns is not easily adaptable to other types of operations, and the machinery has doubtful liquidation value because of its age.

Because of the problems pointed out earlier, the long-term survival of the company depends on (1) the discovery and development of a continuing source of business (if such a source exists), or (2) diversification or conversion of present facilities into a completely new line of manufacturing endeavor. The alternative to these courses of possible action, of course, is to liquidate present manufacturing operations and to concentrate on the development of the supply company which is already a profitable operation.

Exhibit R

CASE STUDY ABSTRACT (Company #18)

Background

This manufacturer of stone products is located in a small town in one of the State's major granite-producing areas. Like most of the other firms in the local industry, the company is independently owned and operated. Collectively, the local companies have a substantial share of the national market, competing principally with manufacturers in Vermont and Minnesota.

This company was formed more than 10 years ago as a partnership. The present owner later bought out his partner and is now the principal stockholder. The firm now employs approximately 15 people, most of whom work in the plant. The company's products are promoted through a strong direct-mail service to retailers. Three commission salesmen are employed, but their volume is only about 10 per cent of total sales.

Manufacturing facilities appear to be adequate, although some problems of layout have been noted. Quality control requirements and materials handling problems are critical considerations in the manufacturing phase of the company's operations.

The company has an unusually sophisticated approach to financial administration. Its records and reports are far more complete than in most small firms. Although the company does not engage in quarrying operations, there have been no significant problems in purchasing an adequate supply of granite from local quarriers. Capital requirements for this type of business are not particularly large unless quarries are developed. In that case, there is a high degree of speculation involved that intensifies the capital risk.

Problems and Needs

Personnel

The supply of skilled workers is short but not critical at the moment, but the future supply could become a serious problem if an effective apprenticeship program is not reestablished and maintained. As machines replaced men during the past several years, the established apprenticeship program in the industry lost some of its support and much of its effectiveness.

It is highly improbable that the more highly skilled jobs will be eliminated by future technological change, and a sound apprenticeship program is necessary to assure an adequate supply of skilled workers in the future.

Many personnel problems have been avoided by the president's understanding of the value of attracting good employees and maintaining good employee relations. The company voluntarily provides wages and benefits which exceed those demanded by the industry union. Office employees participate in a profit-sharing retirement plan and are eligible for medical payments in amounts limited by an established percentage of monthly salaries. Plant employees receive a bonus each year based on a percentage of their annual wage. A group insurance plan covers all employees. The plant foreman receives a monthly bonus if the plant payroll does not exceed an established percentage of shipments. Recent additions have been made to the plant heating system to further assure the comfort of the workers.

Labor turnover has been a problem in the past, but employment is relatively stable now. Before the seasonal problem was alleviated (see next section), it was often necessary to lay off some workers during the winter months. Although there is still some swapping of jobs in the industry, the company has succeeded in stabilizing its work force by offering year-round employment and by providing a sound employee relations program.

Although employee safety is not as serious a problem as in the past, it still deserves serious study and consideration. The danger of silicosis, once a common occupational disease of the industry, has been almost completely eliminated through the control of dust and the development of safety equipment. Safety education and training of employees must continue to be emphasized as the best means of promoting safety in the operation of machines and equipment and in the handling of materials.

Sales

In a highly competitive market, the company has wisely chosen to base its sales approach on quality, service, and customer relations. This is a sound, far-sighted policy in view of the number of low-quality, low-price competitors in the industry. The company offers a special carving process, an extra treatment feature, special designs, prompt delivery, dealer sales aids, and other special services to dealers.

The president maintains good customer relations by joining and actively participating in many retail dealer associations. Through personal contact

with dealers at conventions and other meetings, the president keeps intimately acquainted with dealer problems and promotes on a face-to-face basis the products and services offered by his company. This "personal touch" is a good example of how a small businessman can capitalize on the intimacies of size in competing with larger companies.

In the past, the drop-off of sales during the winter months created a particularly serious problem. It was often necessary to cut back production and lay off workers during the slack season. This seasonal sales problem has been at least partially solved by the generally accepted practice in the industry of offering June 1 billing on orders received during the winter months. Other problems are created by this practice--increased finished product inventory prior to spring shipment and decreased working capital prior to summer receipt of payment, for example--but the advantages of year-round production seem to outweigh the disadvantages of the delayed-payment approach.

Manufacturing

Quality control requirements are high since die stock must be free from defects and discolorations. Often the quality of a slab can not be determined until it is washed and polished, and rejects which can not be used for base stock or border stone must be discarded. Unfortunately, no economical use has been found for waste granite. This is certainly an area that requires continuing study.

Materials handling is a very critical phase of the manufacturing process because of the size and weight of the materials handled, the safety factors involved, and the possibility of loss through breakage. It is important, therefore, that plant layout be so designed that the handling of material will be minimized. Availability of space rather than work flow sequence has dictated the placement of new equipment as the company has grown and become more mechanized and, as a result, the present plant layout is not as efficient as it could be. Management is aware of this problem, and plans have been made for at least partially correcting this situation.

Financial Management

Accounts receivable losses are common in the industry because of the make-up of the distribution system at the retail level and the specialized nature of the product. Many retail monument dealers are small and

marginal and have insufficient working capital to be considered good credit risks. In addition, the product itself can not be considered as collateral for the credit since carved and lettered monuments have no reuse or resale value. This company has alleviated the accounts receivable problem by taking advantage of the credit and collection services of a national association in the industry. Sales are made only to quality accounts, and the collection services of the association are used on past-due accounts.

The use of this credit and collection service is another example of the company's willingness to take advantage of outside assistance when the cost involved is more than offset by the savings gained through use of the service. Too often small businesses arbitrarily refuse outside assistance with the rationalization that they can not afford the cost of the service.

The company needs a better cost control system as a tool for pinpointing operating inefficiencies and profit bottlenecks. Although there would be some problems in developing a completely effective system, it would be possible to establish a system which would give management a more detailed analysis of operating results.

Competitive Practices

As was pointed out earlier, the company has chosen to compete on the basis of quality and service. In a large competitive market, it is almost imperative that a small business choose its competition and not try to challenge larger competitors for the general market. In this way the small business can take advantage of its ability to offer a more personalized service.

Because of its emphasis on quality and service, the company suffers most from the competition of so-called "shade tree" operators who sell an inferior product at cut-rate prices. This, the president feels, not only hurts his business, but is detrimental to the industry as well.

One type of competition that this company (as well as the entire monument industry) must face is the recent growth of "no monument" cemeteries. The extent of this competition is not known; it would be helpful to the company and the industry to know more specifically just how serious this competition is likely to be in the future.

Role of SBA

The company has never used the services offered by the Small Business Administration. Bank financing has been available without outside assistance, the company has not engaged in government contract work, and the president was not familiar with the SBA management and technical assistance program. After learning of the services available, he agreed that the SBA probably could be of assistance to his company and other small businesses.

Management conferences and management development courses would be of particular interest to the president. Publications relating to cost control and production control would be helpful. Because the local granite industry is composed of a concentrated group of small firms, the Small Business Administration could be of assistance to the entire industry by conducting industry studies and by offering management and technical assistance on an industry-wide basis.

Summary

Management of the company is very sound. Although the president is not academically trained in business administration, he has a thorough knowledge of the granite industry and has demonstrated unusual ability in sales promotion and employee relations, an open-minded approach to outside assistance and opportunities to learn, and a willingness to break from the deeply entrenched traditions of the industry.

Profit margins in this industry have been maintained in recent years only through reduction in operating costs. It is unlikely that the inefficient operators will survive as the more progressive firms in the industry continue to mechanize and develop more economical methods of production. This company has the potential not only for survival, but for growth. The following management practices of the company are characteristic of most successful, well-managed businesses:

1. The principal is willing to delegate authority and to take advantage of the abilities of his subordinates. Many small businesses have failed because the owner jealously guarded his authority and tried to do all the work himself.

2. The company has wisely picked a market in which it can compete successfully. The decision to compete on the basis of quality allows the company to take advantage of its size and indicates an intention of

permanency in the industry. Many small businesses have failed either because they attempted to compete for a general market that was dominated by big business, or because they chose to take temporary advantage of a market situation by cutting quality and price.

3. Management recognizes the value of complete and accurate records as the bases for operating decisions. Too many small businessmen feel that their operations are too small to warrant the maintenance of detailed records. As a result, they often fail without ever knowing the reasons why.

4. The company has developed its marketing program by emphasizing good customer relations. In so doing, the company has taken advantage of its ability as a small company to provide the "personal touch" which is often lost when a company grows larger.

5. The president of the company has demonstrated a remarkable open-mindedness in taking advantage of opportunities to improve himself and his business operations. Many small businessmen either distrust or feel that they can not afford outside assistance. More seriously, too many small businessmen do not recognize the need for self-improvement or are "too busy" with routine operations to take advantage of opportunities for assistance when they arise.

Exhibit S

CASE STUDY ABSTRACT (Company #19)

Background

This firm is located within commuting distance of one of the larger metropolitan areas in the State. The company is a part of the general apparel industry group.

The location of the firm was in part by design, in part by accident. The owners selected a general area appropriate to their needs. The selection of the particular town was based on the community participation offered.

The company is family held. It was started less than five years ago as an off-shoot from a northern company which had been operated by the same family. The construction of a plant in the South made it possible to manufacture apparel closer to the major market, and additional benefits from savings in labor costs were anticipated.

The company now employs slightly over 200 workers, most of whom are women. Its products are men's and boys' apparel. Output is distributed primarily in the southern states, although the marketing area itself covers some 30 states. Distribution is through both company salesmen and sales agents. Manufacturing facilities are excellent, although the firm has grown so rapidly that space is becoming a problem. Financial management controls are quite good; management consciously "pays a lot to know." No serious purchasing problems are encountered since most of the materials required are available either from within the State or in neighboring states. Inventory controls are well established. The company's capital position has benefited from the community assistance it received in regard to plant facilities. In addition, the company has received a loan from the SBA.

Problems and Needs

Personnel

In starting the plant, management had timed its production start-up on a very tight schedule. The employment of workers, the installation of

equipment, and the training of personnel created a number of immediate and serious problems. Perhaps the most serious problem the company has encountered has been the lack of industrial work experience among most of the job applicants. There is a very limited labor pool of industrially oriented workers in the immediate area. This has been especially true of supervisory candidates. Looking back, management feels that it might have been wise to have begun with supervisory personnel imported from other areas. However, there are hazards to this approach, too. In many cases, the selection and training of local personnel for supervisory positions has brought employee relations advantages that more than offset the initial problems.

The problem of training workers will continue to be difficult. This again points up the need for a more sophisticated approach to vocational education. The State must recognize that raw labor resources are not necessarily an asset.

There is no question that the maintenance of good employee relations will be of primary importance in the future. Union activity to this point has largely taken the form of charges of unfair labor practices. The company complains that it is placed in the position of having to employ its own defense counsel while the union benefits from the services of NLRB attorneys. This whole problem points up the need for a close coordination of industrial relations counseling within the State. The situation can create uniquely frustrating problems for a small company.

Sales

There is a continuing need for reliable market data. Like most small companies, it is difficult to justify a separate market research staff. SBA's marketing services should be of assistance in this area.

Manufacturing

The company has excellent manufacturing facilities. Maintenance is thorough, and the surroundings are very attractive. The requirement for a stable work load is most important in order to avoid losing trained workers through layoff. Equally important, because of the cost considerations involved, is the need for a constant check on work methods, equipment improvements, etc.

Role of SBA

The company's only experience with SBA came during the process of applying for a loan. Management felt that the loan requirements were very rigid. Management now feels that it would have been wiser to have obtained funds from another source.

The company has never used any of the other services of SBA. Since this industry has so many small firms in it, SBA might profitably consider the development of special publications and services aimed at the industry group as a whole.

Summary

The company appears to be well managed, with more than usual attention to the prime requirements of careful planning and reliable cost control. The lack of these two considerations has been a frequent cause for trouble in many small businesses. The company produces a quality product, reasonably priced, and with an apparently broad base for its market.

Management has demonstrated a responsible and sensitive approach to the problems of operating a new plant. The owners have recognized the importance of building good employee and community relations, and the company's local position seems to be assured.

Exhibit T

CASE STUDY ABSTRACT (Company #20)

Background

This company, a manufacturer of school supplies and paper speciality items, is located in the suburbs of one of the State's major metropolitan areas. Founded over 20 years ago, the firm is one of the better examples of light, clean industry.

The company presently employs approximately 80 production workers and some 30 office, sales and managerial personnel. Its products are tablets, notebooks, composition books, ream paper, and specialty items. Distribution is through company salesmen to jobbers, school systems, and wholesalers located largely east of the Mississippi.

Manufacturing facilities are good, although additional systems may be required if production requirements are changed. At present, warehousing space is perhaps the major need. Financial management controls are apparently adequate, but desirable refinements are gradually being introduced. Raw materials are available without difficulty. Inventory control sometimes presents some difficulty because of the varying demand of the market. Capital requirements have been met without difficulty.

In considering the overall operations of the company, it is important to point out that many policies and practices within the industry have been slow to change over the years. Only in recent years have members of the industry begun to develop more diversified products--new types of notebooks, binders, specialty papers, etc. Certain aspects of manufacturing have been substantially unchanged. Wage rates have been traditionally low but are increasing now. Marketing methods and management practices are becoming more refined in response to growing competitive pressure.

Problems and Needs

Personnel

The most serious problem which seems to have developed in the personnel area is the wage competition stimulated by other nearby industries. Wage rates have been improved in recent months, and the company is currently beginning the use of incentives in some operations. Training requirements

appear to be of special importance. Although the company does not use a large percentage of skilled workers, experience has shown that most workers must be trained on the job.

Planning

As in many other small and medium-sized companies, the pressure of day-by-day operating responsibilities makes it difficult to project and develop the administrative systems that are ideally needed. More extensive planning is now being conducted, and greater emphasis is being given to establishing accurate cost controls, standardizing production methods, and, in general, refining administrative controls.

Sales and Competition

Competition in this industry is severe. In some areas, there is especially difficult pricing competition. For example, in certain midwestern states, converters have managed to bring costs down to the point that their sales price on large orders is about equivalent to this company's production costs. This seems to be particularly evident in the bidding prices on government contracts. For this reason, the company has shown little or no interest in developing government contract negotiations.

The company has shown little interest in market forecasting and only limited interest in new product development.

While systems and procedures are important to help develop a realistic profit margin, no small or medium-sized business can exist in today's market without making sales development its primary goal. The most successful firms considered in this survey have been those which have concentrated their effort toward an aggressive sales program. Where product quality is essentially the same and prices are competitive, constant sales effort, superior customer service, and reliable market information make the difference between winning or losing a market.

Manufacturing

Facilities and equipment are reportedly appropriate for immediate needs. Should the company diversify, additional systems would be required. The converting operations are basically uncomplicated by comparison with other industries. The more obvious production problems appear to be related to the use of manpower and to the identification of manufacturing costs.

Financial Management

Accounting methods are becoming more refined. In the past, cost accounting appears to have been based largely on job-lot cost estimates, without a determination of specific machine burden. Cost centers are now being aligned with departments and more specific areas of responsibility. Product pricing is necessarily based on competitive levels rather than on costs and planned profit margins. While price fluctuations appear, they do not seem to be as violent as in some other industries.

Inventory Control

Inventory control appears to be a major problem in terms of establishing reliable levels and maintaining the formal controls necessary to insure a reasonable turnover. The company is presently enlarging its warehousing facilities in order to provide a larger inventory of finished products and thereby provide more effective customer service. In effect, the company is providing temporary warehouse storage for certain customers for whom shipments have been projected. The larger inventories now carried naturally tie up operating funds, but no serious problems have developed.

Role of SBA

The company has had no experience with the Small Business Administration, either in connection with its financial or technical services. Management feels that SBA should restrict its services to those which do not involve the internal operations of a company. In effect, SBA should limit itself to financial assistance services.

Summary

This company has much to recommend it. It has had a profitable record over the years, and with the refinement of management controls and the continuation of an imaginative sales effort, it should continue to develop.

The source of most past problems appears to be related to the planning of administrative controls, production operations, and marketing management. More extensive planning is now being conducted, and greater emphasis is being given to establishing cost controls, standardizing production methods, and, in general, refining the procedures necessary to hold costs down.

There is a continuing need for further study of administrative, financial, and production controls. There are a growing number of mergers,

usually lateral, which intensify the production and marketing power of competitors. To stand up in such a market, production, sales and financial management must be well planned and organized.

Special attention should be given to the possibility for diversification. Within the limits of market potential, the requirements for additional capital investment, and the feasibility of more varied manufacturing systems, new products might well offer some interesting growth possibilities.

Appendix B
METHODOLOGY

Appendix B

METHODOLOGY

The research required to achieve the objectives of the project was divided into four phases. The procedure followed in accomplishing each of these phases is described in the following sections.

Phase I

The objective of Phase I was to survey by questionnaire a large sample of small manufacturing firms in Georgia to accumulate comprehensive data on management problems and needs and on reactions to present SBA efforts to meet these needs.

Design of preliminary questionnaire

The questionnaire was designed to elicit responses which would provide the basic information required in identifying specific types of management problems and needs; determining familiarity with, use of, and reaction to available management assistance services of the Small Business Administration; and identifying firms with representative problems and needs for more detailed study and analysis.

To insure the elicitation of reliable responses and to encourage the participation of as many firms as possible, considerable care was taken in designing the questionnaire and in drafting the covering letter which were used in surveying the problems and needs of small manufacturers. Brevity and completeness were the criteria used in developing the questionnaire form. Questions were eliminated which did not contribute directly to the identification of the respondent, the definition of problems and needs, and the indication of familiarity with, use of, and reaction to management assistance services of the Small Business Administration.

Identification questions were limited to those which made possible the determination of the qualification of the respondent as "small business" and as a "manufacturer" and which permitted the analysis of responses by geographic location, industrial classification, size, age, type of organization, and union status. Multiple choice and check-list answers were provided where possible to make it more convenient for respondents to complete the form and to facilitate the tabulation and classification of responses.

To avoid forced and stereotyped answers, two free-expression questions were used--one concerning the description of major problems and the other asking for suggestions for improving SBA services.

Validation of questionnaire

The preliminary questionnaire form and covering letter were critically examined by several small businessmen in the area. Comments and suggestions were carefully evaluated and appropriate changes were incorporated in the final draft of the covering letter and questionnaire form.

Questionnaires were mailed to a trial sample of 216 small manufacturers in the State to test the rate of response and the consistency of interpretation by respondents. A total of 206 questionnaires were delivered (10 were returned by the post office for various reasons), and questionnaires were completed and returned by 71 small manufacturers. The 34.5 per cent rate of response in the sample survey was considerably higher than was anticipated, and the questionnaire answers were unusually complete and consistent. As a result, no further changes were made in the covering letter or questionnaire form.

Copies of the letter and the questionnaire are included as Exhibits A and B at the end of this Appendix section.

Selection of firms to be surveyed

The most time-consuming step in Phase I of the project was the development of a mailing list of small manufacturers to be contacted in the questionnaire survey. Since efforts to locate a previously compiled list of this type were unsuccessful, it was necessary to develop an original list from a variety of sources.

It was determined in advance that the survey sample would consist of all small manufacturing firms in the State that could be identified from the sources available. Although the survey would approach total coverage of small manufacturers, it was considered a sample since it was recognized that it would be impractical--if not impossible--to identify every firm in the State that qualified as a small manufacturer. The standard SBA definition of "small business" was used, and a special definition of "manufacturer" was developed for purposes of this study (see Exhibit C at the end of this Appendix section).

The basic survey list was compiled from the Georgia Department of Labor's records of manufacturing firms covered by the State's Unemployment Compensation Law. The names of a number of firms not covered by this law or omitted from the Department of Labor records for other reasons were picked up from the Georgia Department of Commerce publication Georgia Manufacturers, Producers-Processors, 1958. In addition, local chambers of commerce in several major cities in the State provided lists of manufacturing firms in their areas. Since only local chamber lists included street addresses, it was necessary to search telephone directories from almost every community in the State to complete the mailing list.

Sufficient data were not available in advance to determine precisely which firms qualified as "small manufacturers" and which did not. However, employment figures and Standard Industrial Classification codes made possible the elimination of those companies which obviously did not qualify. The final list was composed of the names and addresses of over 4,000 firms which, according to the best available information, were "small manufacturers" under the established project definitions.

Survey of selected firms

Questionnaires and covering letters were mailed to 4,224 small manufacturers throughout the State. A total of 152 letters were returned by the post office marked "out of business," "unknown," "moved--left no address," etc. The remaining 4,072 questionnaires were assumed to have been delivered.

As of the first cut-off date (December 31, 1959), questionnaires had been received from 995 respondents. Of this number, 305 questionnaires were eliminated either because the respondents did not qualify as small manufacturers or because the responses were too incomplete to be useable. The remaining 690 questionnaires were from qualified small manufacturers, representing every area of the State and every major industrial classification. Prior to follow up, questionnaires had been returned by 24.4 per cent of the companies to whom letters had been delivered.

Follow up of questionnaires

In preparation for follow-up contacts, returned questionnaires were tabulated by geographic areas and industrial classifications to determine in which areas and industries follow-up activities should be concentrated. Only limited follow up was required because of the good rate of response

to the original mailing and because of the close relationship between the distribution of firms, geographically and by industry, and the questionnaire response. Follow-up contacts were made by telephone and by personal visits.

A final cut-off date was established (January 31, 1960) and, although a few questionnaires continued to come in after that time, only those responses which were received on or before the cut-off date were included in the final tabulation of survey data. Following is a final summary of the questionnaires distributed and the responses received:

Total number of questionnaires mailed	4,224
Questionnaires returned--undelivered	<u>152</u>
Total number of questionnaires delivered	4,072
 Total number of responses received	 1,086
Responses eliminated (incomplete or not small business)	<u>329</u>
Total number of qualified responses	757
 Rate of response to questionnaires delivered	 26.7%
 Rate of qualified response to questionnaires delivered	 18.6%

The final distribution of questionnaire returns by geographic areas is shown in Appendix Table 1. Each of the State's 159 counties is included in one of the areas specified. Each area is composed of one or more labor market areas (identified by the name of the primary city in the area). This method of grouping was chosen so that the State could be divided into a workable number of areas in which the population of small manufacturing firms was reasonably equal (with the obvious exception of the Atlanta area which could not be divided). It is interesting to note that in no area does the relative number of questionnaire returns differ from the relative number of small manufacturing firms by more than 1.9 per cent. This pattern of distribution was much better than was anticipated when the survey was begun.

The final distribution of questionnaire returns by industry groups is shown in Appendix Table 2. No questionnaires were mailed to firms in the Ordnance group (SIC 19) or the Tobacco group (SIC 21) since none of the limited number of firms in the State in these classifications qualified as small manufacturers. In no group except Wood (SIC 24) does the relative number of questionnaire returns differ from the relative number of small manufacturing firms by more than 3.3 per cent. The difference in the Wood

Appendix Table 1

DISTRIBUTION OF QUESTIONNAIRE RETURNS
BY GEOGRAPHIC AREAS

<u>Geographic Area</u>	<u>Number of Returns</u>	<u>Per Cent of Total Returns</u>	<u>Percentage Distri- bution of Small Firms ^{1/}</u>	<u>Percentage Differ- ence</u>
Atlanta Area	219	28.9	30.5	-1.6
Albany-Moultrie-Thomasville Area	73	9.6	8.8	.8
Savannah-Brunswick Area	70	9.3	7.4	1.9
Rome-Cedartown-Dalton-Summerville- Lafayette Area	70	9.3	9.9	- .6
Macon Area	54	7.1	6.6	.5
Griffin-Thomaston-Carrollton- Newnan-LaGrange Area	46	6.1	6.4	- .3
Valdosta-Waycross Area	43	5.7	5.2	.5
Augusta Area	41	5.4	5.6	- .2
Athens Area	38	5.0	5.3	- .3
Milledgeville-Dublin Area	35	4.6	5.3	- .7
Columbus Area	34	4.5	4.3	.2
Gainesville-Toccoa Area	<u>34</u>	<u>4.5</u>	<u>4.7</u>	<u>- .2</u>
TOTAL	757	100.0	100.0	----

^{1/} Based on analysis of unpublished data accumulated by Georgia Department of Labor.

Appendix Table 2

DISTRIBUTION OF QUESTIONNAIRE RETURNS BY INDUSTRY

SIC No.	Industry	Number of Returns	Per Cent of Total Returns	Percentage Distri- bution of Small Firms ^{1/}	Percentage Differ- ence
20	Food	154	20.3	23.4	-3.1
22	Textiles	47	6.2	7.1	- .9
23	Apparel	53	7.0	9.3	-2.3
24	Wood	104	13.7	21.0	-7.3
25	Furniture	53	7.0	4.9	2.1
26	Paper	8	1.1	1.9	- .8
27	Printing	8	1.1	---	1.1
28	Chemicals	54	7.1	5.3	1.8
29	Petroleum products	1	.1	.5	- .4
30	Rubber and plastics	10	1.3	.8	.5
31	Leather	8	1.1	.7	.4
32	Stone, clay and glass	79	10.4	7.6	2.8
33	Primary metals	8	1.1	1.3	- .2
34	Fabricated metal products	52	6.9	5.2	1.7
35	Machinery	66	8.7	5.4	3.3
36	Electrical machinery	11	1.5	1.0	.5
37	Transportation equipment	14	1.8	1.3	.5
38	Instruments	3	.4	.4	--
39	Miscellaneous	<u>24</u>	<u>3.2</u>	<u>2.9</u>	<u>.3</u>
	Total	757	100.0	100.0	----

^{1/} Based on analysis of unpublished data accumulated by Georgia Department of Labor.

Appendix Table 3

CHARACTERISTICS OF SMALL MANUFACTURERS
RESPONDING TO QUESTIONNAIRE SURVEY

<u>Characteristic</u>	<u>Number</u>	<u>Per Cent</u>
<u>Number of employees:</u>		
Less than 25	401	53.0
25 to 99	260	34.3
100 to 249	79	10.4
250 or more	9	1.2
Not indicated	8	1.1
<u>Age of organization:</u>		
Less than 1 year	4	.5
1 to less than 3 years	38	5.0
3 to less than 5 years	71	9.4
5 to less than 10 years	136	18.0
10 to less than 20 years	245	32.4
20 years or more	251	33.1
Not indicated	12	1.6
<u>Type of organization:</u>		
Corporation	472	62.4
Partnership	102	13.5
Proprietorship	159	21.0
Cooperative	1	.1
Not indicated	23	3.0
<u>Union Status:</u>		
Union	61	8.1
Non-union	680	89.8
Not indicated	16	2.1

group can be partially explained by the fact that all logging camps and logging contractors (SIC 2411) and some general sawmills and planing mills (SIC 2421) were excluded from the questionnaire mailing, and in all cases it was not possible to identify these four-digit industries so that they could be excluded from the computation of the percentage distribution of small firms. Overall, however, the distribution of questionnaire returns by industry groups was considered to be exceptionally representative.

To further identify the survey sample, a tabulation was made of the characteristics of the qualified small manufacturers that returned completed questionnaire forms. This tabulation is presented in Appendix Table 3. Assuming that the mode is representative, the typical small manufacturer upon which this study is based has less than 25 employees, has been in operation for 10 or more years, is incorporated, and has no union affiliation.

Accumulation, tabulation, and analysis of survey results

As completed questionnaires were received, the responding companies were classified according to county of operation and SIC four-digit code. From size, industry and affiliation information, it was determined whether or not the companies qualified as small manufacturers, and qualifying companies were assigned identification code numbers.

A classification system (see Exhibit D) was developed for identifying problem areas and specific problems indicated in the free-expression answers to Question 9 (What major problems have you encountered in developing and managing your company?). A simple alphabetical code for tabulation purposes was established for the check-list answers to Question 10 (In what areas of your operation would managerial or technical assistance be most helpful?).

A master tabulation card was prepared for each qualified small manufacturer that participated in the survey. This card indicated in abbreviated and code form the company's identification code number, SIC four-digit code, number of employees, age of company, type of organization, union status, county of operation, and coded answers to Questions 9 and 10.

Answers to Questions 11 and 12 (relating to the use and evaluation of SBA services) were not included on the master cards since it was felt that a tabulation of answers by industry, size, age, etc., would not be necessary for analysis purposes. A trial analysis by urban and non-urban locations revealed no significant differences in responses; therefore, answers to these

questions were tabulated in total without attempting a more detailed breakdown.

Phase II

The objective of Phase II was to analyze in depth the management and operations of 20 firms whose problems, needs, and reactions were representative of those firms that participated in the Phase I survey. The purpose of this analysis was to discover the underlying causes of management problems and to develop information which would be helpful in interpreting the results of the questionnaire survey.

Selection of firms for case study analysis

It was of particular importance that the companies selected for case study analysis be representative of the whole group that supplied the basic information for the study. The selection of a purposive sample of 20 companies for detailed analysis was made after careful consideration of their industry classification, geographic location, number of employees, age, type of organization, and related factors. The distribution and characteristics of the companies that participated in the study are shown in Appendix Tables 4, 5 and 6.

In addition to the consideration of industry and geographical representation, it was of special importance to choose companies whose past problems and current needs were representative of the whole group. Appendix Tables 7 and 8 indicate the nature and frequency of past problems among the companies that participated in the study. Table 7 shows the major problem classification; Table 8 shows the specific nature of problems encountered and their frequency. The fact that the first five problem classifications in Table 8 are the same as for the total group except for the order in which they appear confirms the contention that the nature and distribution of problems among the case study companies were essentially representative of the whole group.

Appendix Tables 9 and 10 illustrate the nature and frequency of current needs for assistance among the case study companies. Table 9 shows the major areas of need; Table 10 illustrates the specific areas of operations requiring assistance. In Table 9, the order of need is the same as for the whole group, except that the areas of "Manpower" and "Sales" are

Appendix Table 4

CHARACTERISTICS OF SMALL MANUFACTURERS
SELECTED FOR CASE STUDY ANALYSIS

<u>Characteristic</u>	<u>Number</u>	<u>Per Cent</u>
<u>Number of employees:</u>		
Less than 25	8	40
25 to 99	5	25
100 to 249	6	30
250 or more	1	5
<u>Age of organization:</u>		
1 to less than 3 years	2	10
3 to less than 5 years	2	10
5 to less than 10 years	3	15
10 to less than 20 years	5	25
20 years or more	8	40
<u>Type of organization:</u>		
Corporation	20	100
<u>Employees represented by union:</u>		
Union	2	10
Non-union	18	90

Appendix Table 5

DISTRIBUTION OF SMALL MANUFACTURERS
SELECTED FOR CASE STUDY ANALYSIS
(By Geographic Areas)

<u>Geographic Areas</u>	<u>Number</u>	<u>Per Cent</u>
Atlanta Area	4	20
Albany-Moultrie-Thomasville Area	1	5
Savannah-Brunswick Area	3	15
Rome-Cedartown-Dalton-Summerville-Lafayette Area	2	10
Macon Area	2	10
Griffin-Thomaston-Carrollton-Newnan-LaGrange Area	1	5
Valdosta-Waycross Area	1	5
Augusta Area	1	5
Athens Area	2	10
Milledgeville-Dublin Area	1	5
Columbus Area	2	10
Gainesville-Toccoa Area	<u>-</u>	<u>--</u>
TOTAL	20	100

Appendix Table 6

DISTRIBUTION OF SMALL MANUFACTURERS
SELECTED FOR CASE STUDY ANALYSIS
(By Industry Groups)

<u>SIC No.</u>	<u>Industry Group</u>	<u>Number</u>	<u>Per Cent</u>
20	Food	3	15
22	Textiles	2	10
23	Apparel	2	10
24	Wood	3	15
25	Furniture	2	10
26	Paper	1	5
27	Printing	-	-
28	Chemicals	2	10
29	Petroleum products	-	--
30	Rubber and plastics	-	--
31	Leather	-	--
32	Stone, clay and glass	2	10
33	Primary metals	-	--
34	Fabricated metal products	1	5
35	Machinery	-	-
36	Electrical machinery	-	-
37	Transportation equipment	1	5
38	Instruments	-	-
39	Miscellaneous	<u>1</u>	<u>5</u>
	TOTAL	20	100

Appendix Table 7

CLASSIFICATION OF PROBLEMS ENCOUNTERED IN DEVELOPING
AND MANAGING SMALL MANUFACTURING FIRMS
(Case Study Respondents)

<u>Major Problem Classification</u>	<u>Number</u>	<u>Per Cent</u>
Manpower	35	50.7
General Management	11	15.9
Sales	7	10.1
Financial Management	6	8.7
Manufacturing	5	7.2
Purchasing	2	2.9
Inventory Control	2	2.9
Capital	<u>1</u>	<u>1.4</u>
TOTAL	69	99.8

Appendix Table 8

TYPES OF PROBLEMS ENCOUNTERED IN DEVELOPING AND
MANAGING SMALL MANUFACTURING FIRMS
(Case Study Respondents)

<u>Type of Problem</u>	<u>Number</u>	<u>Per Cent</u>
Training of non-management personnel	8	11.6
Recruitment of management personnel	5	7.2
Training of management personnel	5	7.2
Recruitment of non-management personnel	4	5.8
Sales promotion	3	4.3
Cost control	3	4.3
Employee job interest	2	2.9
Product diversification	2	2.9
Planning and scheduling production	2	2.9
Availability of raw materials	2	2.9
Inventory control	2	2.9
Organization structure	2	2.9
Coordination of operations	2	2.9
Miscellaneous (weather, natural conditions, etc.)	2	2.9
Absenteeism	2	2.9
Employee relations	2	2.9
Planning operations	2	2.9
Labor turnover	1	1.4
Labor productivity	1	1.4
Market information and opportunities	1	1.4
Manufacturing methods	1	1.4
Technical engineering assistance	1	1.4
Quality control	1	1.4
Collection of accounts receivable	1	1.4
Accounting methods	1	1.4
General management problems	1	1.4
Freight rates	1	1.4
Short-term capital needs	1	1.4
Selection of non-management personnel	1	1.4
Employee morale	1	1.4
Union relations	1	1.4
Lack of management assistance (due to size)	1	1.4
Employee discipline	1	1.4
Sales forecasting	1	1.4
General financial management problems	1	1.4
Paperwork control	1	1.4
	<hr/>	<hr/>
TOTAL	69	98.9

Appendix Table 9

CLASSIFICATION OF AREAS OF OPERATION REQUIRING
MANAGERIAL OR TECHNICAL ASSISTANCE
(Case Study Respondents)

<u>Major Area of Need</u>	<u>Weighted Number</u>	<u>Per Cent</u>
Manufacturing	189	28.7
Manpower	154	23.4
Sales	132	20.0
Financial Management	69	10.5
General Management	64	9.7
Purchasing	29	4.4
Inventory Control	<u>22</u>	<u>3.3</u>
TOTAL	659	100.0

Appendix Table 10

AREAS OF OPERATION REQUIRING
MANAGERIAL OR TECHNICAL ASSISTANCE
(Case Study Respondents)

<u>Area of Need</u>	<u>Unweighted</u>		<u>Weighted</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Production methods	12	8.0	55	8.3
Training employees	12	8.0	53	8.0
Recruiting personnel	10	6.7	46	7.0
Organizational planning	10	6.7	46	7.0
Production scheduling	9	6.0	40	6.1
Cost control	9	6.0	38	5.8
Sales promotion	8	5.3	36	5.5
Quality control	8	5.3	36	5.5
Maintaining stable work force	7	4.7	33	5.0
Diversification	7	4.7	31	4.7
Market information	8	5.3	31	4.7
Raw materials supply	6	4.0	29	4.4
Maintenance of equipment	5	3.3	25	3.8
Research and development	6	4.0	24	3.6
Inventory control	6	4.0	22	3.3
Employee relations	5	3.3	22	3.3
Distribution channels	6	4.0	21	3.2
Accounting methods	4	2.7	17	2.6
Figuring contract bids	3	2.0	14	2.1
Customer relations	3	2.0	13	2.0
Legal assistance	3	2.0	12	1.8
Meeting contract specifications	2	1.3	9	1.4
"Delivery to customers"	<u>1</u>	<u>0.7</u>	<u>6</u>	<u>0.9</u>
TOTAL	150	100.0	659	100.0

transposed. In Table 10, eight of the first 10 areas of need are the same as for the whole group except for the order in which they appear.

It will be noted that the areas of need are shown with weighted values. This was done to establish a comparative value for the statement of need since the respondents were asked to indicate the relative importance of each area of need by specifying "1" for the area of greatest need, "2" for the area of second greatest need, and "3" for the area of third greatest need. In weighting the responses, areas ranked first were given a value of 6; second, a value of 5; third, a value of 4; fourth, a value of 3; fifth, a value of 2; and sixth and above, a value of 1. If areas of need were checked but not ranked, the middle value of 4 was assigned. If only one area was checked, it was assumed that this was the area of greatest need, and it was assigned a value of 6. This same weighting system was used in tabulating the answers to Question 10 on all questionnaire responses received.

Based on these analyses, the firms that participated in the study were considered to be representative of the whole group in terms of geographical location, industry classification, nature of problems and needs, and related internal characteristics.

Personal investigation and study of firms selected

After the 20 representative companies were selected, letters were sent to each company requesting management's cooperation in the project. A copy of the letter is included as Exhibit E at the end of this Appendix section. Of the original 20 firms contacted, only five failed to respond affirmatively. A reserve of representative firms had been identified during the selection process, and five of these were chosen that most nearly matched those that were eliminated from the original 20. These five firms were contacted, and each of them agreed to cooperate in the study. (It should be pointed out that the previously mentioned tabular analysis of case study companies refers to the final 20 participating firms rather than to the 20 companies originally selected.)

Upon receipt of the company's approval, an appointment was made for a visit to the company. In most cases, two members of the research staff visited each firm. The visits consisted of a series of interviews with various members of the company's management staff and observations of the company's operations.

In order to systematize the gathering of data, an interview guide was developed. The "Guide for the Audit of Small Manufacturers" (see Exhibit F) was designed to cover the major areas of company operations, the nature and significance of its problems and needs, and the appropriate role of the Small Business Administration in the company's particular type of situation. The interviews were not in the strictest sense "guided." The interview guide was used primarily as a reminder to cover all important areas of consideration, but the interview itself was conducted informally and spontaneously.

Development of case histories

Upon completion of a company visit, the case study report was prepared by one of the participating members of the research staff. The format of the report followed the general outline of the "Guide for the Audit of Small Manufacturers" with such individual changes as were appropriate. A copy of the report was sent to the company concerned for approval as to fact and interpretation. Upon approval of the report, the case study was considered to be complete. In many cases, the case studies were from 10 to 15 pages in length. Rather than publish more than 200 pages of case study material as part of this report, an abstract was prepared for each of the case studies. These abstracts are included in Appendix A of this report.

Phase III

The objective of Phase III was to evaluate the problems, needs and reactions identified in Phases I and II and to make specific recommendations for broadening and strengthening management assistance programs and services for small business. This evaluation resulted in specific conclusions, described within the report, on such matters as the following:

1. The nature of the real problems and needs of management in small manufacturing firms.
2. The extent to which these needs are currently being met.
 - a. The extent to which small businesses are familiar with the services now available through the Small Business Administration.
 - b. The degree of use of small business management assistance services.

- c. The value of those services which have been used by small businessmen.
- 3. The specific steps needed to meet the needs of small business management more effectively.

Phase IV

The objective of Phase IV was to present in meaningful form the results of the detailed study of the problems and needs of small manufacturing management. This report, based on the findings and conclusions formulated during the first three phases of the study, represents the fulfillment of the Phase IV objective.

Exhibit A

COVERING LETTER FOR SBA QUESTIONNAIRE

Dear Sir:

Under authority of a recent Act of Congress, Georgia Tech has been commissioned by the Small Business Administration to study the problems and needs of small manufacturers in Georgia. As a result of this study, we expect to develop information which will contribute to an improved and expanded program of assistance for you and other small manufacturers in the State.

So that this program may be tailored to your needs, we would like very much to know what your experience has been in developing and operating your company. Specifically, we are seeking the answers to these questions: What types of operational and managerial problems have you found to be most critical in your business? In what areas of your operation would assistance be most helpful? How useful have present small business assistance programs been to you? The enclosed questionnaire will assist you in sharing this information with us with a minimum of inconvenience to you.

We would appreciate very much your completing the questionnaire as soon as it is possible for you to do so. A stamped self-addressed envelope is enclosed for your convenience in returning the completed form. If we may be of assistance in clarifying the purpose or content of the questionnaire, please do not hesitate to call on us.

Sincerely,

Jerry L. Lewis
Research Scientist

JLL/cp

P. S. - Even if it is not possible for you to complete the questionnaire, will you please answer as many questions as possible and return the form so that we will not trouble you unnecessarily with a follow-up contact.

SURVEY OF SMALL BUSINESS NEEDS

1. Firm name _____
2. Address _____
3. What products do you manufacture or what processes do you

4. Approximately how many employees do you normally have on
☐ Less than 25 ☐ 100 to 249
☐ 25 to 99 ☐ 250 to 499
5. How long has your business been in operation?
☐ Less than 1 year ☐ 3 to less than 5 year
☐ 1 to less than 3 years ☐ 5 to less than 10 year
6. What type of organization? ☐ Corporation ☐ _____
7. Are any of your employees represented by a union? ☐ _____
8. Do you have any affiliated plants or offices? ☐ _____
 - a. If Yes, what is your relation to these affiliates?
☐ Branch ☐ Other (specify) _____
 - b. Please list the names and locations of affiliated plants

9. What major problems have you encountered in developing
 (Describe below the two or three specific types of problems
 most critical in operating your business. Please exclude
 competitive practices, government regulations, etc., and
 primarily with problems of internal operations and management)
 - a. _____

 - b. _____

 - c. _____

10. In what areas

(In the list
 "2" by the area
 greatest need
 spaces provided)

- ☐ Accounting
☐ Cost control
☐ Customer service
☐ Distribution
☐ Diversification
☐ Employee relations
☐ Financing
☐ Inventory control
☐ Legal assistance

11. How familiar
 Which of these
 (Indicate your)

Service

- Publications:
 Management
 Technical Assistance
 Small Business
 Small Business
 "Starting a
 SBA reference
 Management Development
 Management consulting
 Personal counseling
 ment and technical
 Assistance on
 Securing Government
 Work with other
 Research and
 New products

12. To be of great
 or what new service

Please complete and
 Industrial Development
 Engineering Experiment
 Georgia Institute
 Atlanta 13, Georgia

(OVER)

of your operation would managerial or technical assistance be most helpful below, write the figure "1" by the area of greatest need; write the figure 2 by the area of second greatest need; and write the figure "3" by the area of third greatest need. If your most important areas of need are not listed, write them in the space provided.)

Production methods	() Maintaining stable work force	() Quality control
Quality control	() Maintenance of equipment	() Raw materials supply
Business relations	() Market information	() Recruiting personnel
Distribution channels	() Meeting contract specifications	() Research & development
Public relations	() Organizational planning	() Sales promotion
Contract bids	() Production methods	() Training employees
Quality control	() Production scheduling	() _____
Technical assistance		() _____
		() _____

Are you with the services offered by the Small Business Administration? If so, which services have you used? How helpful have you found these services to be? (Indicate answers by placing check marks in the proper columns below.)

	Have not heard of	Have heard of	HAVE USED AND FOUND SERVICE:		
			Little or no help	Fairly helpful	Very helpful
Aids for Small Manufacturers	_____	_____	_____	_____	_____
Aids for Small Manufacturers	_____	_____	_____	_____	_____
Business Bulletins	_____	_____	_____	_____	_____
Business Management booklets	_____	_____	_____	_____	_____
Business and Managing" booklets	_____	_____	_____	_____	_____
Business libraries	_____	_____	_____	_____	_____
Development courses	_____	_____	_____	_____	_____
Conferences	_____	_____	_____	_____	_____
Consulting and advice on management and technical problems	_____	_____	_____	_____	_____
Government contracts	_____	_____	_____	_____	_____
Other prime contractors	_____	_____	_____	_____	_____
Small Business Development	_____	_____	_____	_____	_____
Small Business Administration	_____	_____	_____	_____	_____

Which service to you, which of these programs do you feel should be expanded? Which services should be added?

Send return to:
Small Business Administration
Development Branch
Development Station
Department of Technology
Washington, D.C. 20581

Information supplied by:

Title _____

Date _____

Exhibit C

SBA PROJECT DEFINITIONS

Manufacturer

For purposes of the study of the problems and needs of small manufacturers in Georgia, the definition of the term "manufacturer" is essentially derived from the Standard Industrial Classification definition of "manufacturing." In summary, this includes:

1. Establishments engaged in the mechanical or chemical transformation of inorganic or organic substances into new products.
2. Establishments which are usually described as plants, factories, or mills and which characteristically use power driven machines and materials handling equipment.
3. Establishments which are engaged in assembling component parts of manufactured products, if the new product is neither a structure nor other fixed improvement.
4. Establishments whose final product may be ready for utilization or consumption or may be "semifinished" to become a raw material for an establishment engaged in further manufacturing.
5. Establishments whose production is usually carried on for the wholesale market, for interplant transfer, or to order for industrial users, rather than for direct sale to the domestic consumer.

Specific exclusions in the Standard Industrial Classification definition are the following:

1. Processing on farms if raw materials are grown on the farm and if manufacturing activities are on a small scale without the extensive use of paid labor.
2. Custom grist milling, threshing and cotton ginning.
3. Dressing and beneficiating of ores, and the breaking, washing and grading of coal.
4. Fabricating operations performed at the site of construction by contractors.
5. Assembling, grading and preparing fruits and vegetables for market.
6. Shelling and roasting nuts.
7. Establishments primarily engaged in selling, to the general public, products produced on the same premises from which they are sold, such as bakeries, candy stores, ice cream parlors, shade shops, and custom tailors.

Exhibit C (continued)

So that this study may concentrate on a more homogeneous group of establishments which are more likely to have similar types of operational and managerial problems, this standard definition of "manufacturer" is further restricted to include only those firms that meet the following qualifications:

1. Establishments which are housed in stationary and permanent plants, factories or mills. This will exclude, for example, portable and temporary logging camps and logging contractors (SIC 2411) and some general sawmills and planing mills (SIC 2421).
2. Establishments in which the production process is the primary function of the organization. This will exclude (1) firms engaged in printing and publishing newspapers, periodicals, books and miscellaneous literature (SIC 271, 272, 273 and 274) where creation of the material printed or published is the primary function; and (2) commercial printing firms (SIC 275) and service industries for the printing trade (SIC 279) where the provision of service is paramount to the manufacture of products.

Exhibit D

CLASSIFICATION CODE FOR PROBLEMS REPORTED
ON QUESTIONNAIRE RETURNS
(Question 9)

1. MANPOWER

- 1.1 Recruitment of non-management personnel
- 1.2 Selection of non-management personnel
- 1.3 Training of non-management personnel
- 1.4 Employee job interest
- 1.5 Wage rates
- 1.6 Seasonal layoffs of personnel
- 1.7 Performance review needs
- 1.8 Absenteeism
- 1.9 Employee morale
- 1.11 Recruitment of management personnel
- 1.12 Selection of management personnel
- 1.13 Training of management personnel
- 1.14 Employee relations
- 1.15 Union relations
- 1.16 Lack of management assistance (due to size)
- 1.17 Labor turnover
- 1.18 Labor productivity
- 1.19 Demands on supervision (caused by poor labor)
- 1.21 Personnel records
- 1.22 Job descriptions and job evaluation
- 1.23 Employee benefits
- 1.24 Employee discipline
- 1.25 Accident prevention

2. SALES

- 2.1 Sales leads
- 2.2 Sales promotion
- 2.3 Customer relations
- 2.4 Seasonal sales
- 2.5 Product diversification
- 2.6 Sales forecasting
- 2.7 Market information and opportunities
- 2.8 Distribution channels
- 2.9 Pricing policies
- 2.11 Comprehensive market research
- 2.12 Sales literature, aids, etc.
- 2.13 Product design and packaging

3. MANUFACTURING

- 3.1 Planning and scheduling production
- 3.2 Manufacturing methods
- 3.3 Maintenance of equipment
- 3.4 Technical engineering assistance
- 3.5 Quality control
- 3.6 Production space
- 3.7 Research and development

Exhibit D (continued)

3. MANUFACTURING (continued)

- 3.8 Machine design
- 3.9 Work flow
- 3.11 Waste control
- 3.12 Buildings and other facilities
- 3.13 Modernization of manufacturing equipment
- 3.14 Material handling

4. FINANCIAL MANAGEMENT

- 4.1 Cost control
- 4.2 Long-term financial planning
- 4.3 Short-term budgeting
- 4.4 Collection of accounts receivable
- 4.5 Accounting methods

5. PURCHASING

- 5.1 Availability of raw materials
- 5.2 Purchasing efficiency
- 5.3 Costs of raw materials
- 5.4 Technical advice on purchasing new products
- 5.5 Sources of special equipment

6. INVENTORY CONTROL

- 6.1 Warehousing efficiency

7. GENERAL MANAGEMENT

- 7.1 Organization structure
- 7.2 Coordination of operations
- 7.3 Transportation
- 7.4 Miscellaneous (weather, natural conditions, etc.)
- 7.5 Planning operations
- 7.6 Legal assistance
- 7.7 Freight rates
- 7.8 Paper work control

8. CAPITAL

- 8.1 Short-term capital needs
- 8.2 Long-term capital needs
- 8.3 Interest rates

9. COMPETITIVE PRACTICES

- 9.1 "Big-business" competition
- 9.2 Competition from agents and imports

10. GOVERNMENT REGULATIONS

- 10.1 Government tax structure
- 10.2 Government regulations covering employment
- 10.3 Paperwork required by government regulations

Exhibit E

LETTER TO COMPANIES SELECTED FOR CASE STUDY ANALYSIS

Dear Mr. _____:

As you will recall, we recently asked your assistance in a survey of small business problems and needs. Your answer and comments were particularly significant and helpful.

We have now completed a review of questionnaire replies from companies throughout the State. Certain problems and needs appear to be in common for most small companies. In order to make an effective presentation of the needs of small businesses, we plan to conduct case studies of a limited number of companies whose problems and needs are representative. We would like to ask your cooperation in permitting such a study of your own company.

The case study has several purposes: 1) to document the history of the company; 2) to define the nature and scope of its operations; 3) to identify the nature, cause, and significance of its problems and needs; and 4) to describe the corrective measure taken or needed. When all case studies are completed, the findings will be evaluated and a summary report developed.

In describing the procedure of the case study, several points should be emphasized:

1. There is no charge of any kind. Our study is financed as a research project administered through the Engineering Experiment Station, Georgia Institute of Technology.
2. The name or location of your company will not be disclosed in any subsequent reports or publications.
3. We would expect to send one or more representatives to visit your company. Our representatives would like to discuss with you and other company officials the nature of the problems you have encountered in organizing and managing the company.
4. You will receive a copy of the case study report and of a summary research report.

We believe that the results of this study will be of practical value to small businesses within the State. It will document the actual experiences of varied industries, and it will consolidate ideas on the practical solution of problems common to small companies.

With these objectives in view, your cooperation will be a worthwhile contribution to the success of this project. Since these studies will begin in the near future, we hope you will write us your approval of this proposal before _____.

Sincerely,

Jerry L. Lewis
Project Director

Exhibit F

GUIDE FOR THE AUDIT OF SMALL MANUFACTURERS

I. Character of the Organization

A. General Management

1. Date of organization
2. Reasons for entrance into the field
3. Background of owners
4. Type of ownership (has it changed from original?)
5. Has ownership itself changed?
6. Form of organization (include chart)
7. Planning requirements
8. Coordinating requirements
9. Decision-making requirements

B. Personnel

1. Number of employees
2. Methods and sources of recruitment for hourly and salaried personnel
3. Methods and sources of recruitment for management personnel
4. Acceptability of employee productivity
5. Employee training requirements
6. Quality of employee relations (including union relations)
7. Degree of absenteeism and turnover
8. Methods of wage and salary payments
9. Extent of employee fringe benefits
10. Nature of health and safety program

C. Sales

1. Type of products
2. Size of sales area
3. Methods of distribution
4. Type of customers
5. Sales distribution (more than 10% to any one customer?)
6. Seasonal variations
7. Extent of market research and sales forecasting
8. Source of product ideas, package design, etc.
9. Method of sales promotion
10. Quality of customer relations

D. Manufacturing

1. Extent of planning and scheduling
2. Availability of suitable facilities and equipment
3. Quality control requirements
4. Maintenance requirements
5. Research and development requirements
6. Processes involved

E. Financial Management

1. Nature of accounting methods
2. Efficiency of cost accounting system

Exhibit F (continued)

E. Financial Management (continued)

3. Extent of budgeting
4. General acceptability of accounts receivable (credit checks?)

F. Purchasing

1. Sources of raw materials
2. Availability of raw materials
3. Purchasing efficiency

G. Inventory Control

1. Extent and type of formal controls
2. Warehousing efficiency

H. Capital Requirements

1. Sources of short-term funds (private vs. commercial)
2. Sources of long-term fund (private vs. commercial)
3. Interest rate levels

I. Competitive Practices

1. Nature and extent of "big business" competition
2. Nature and extent of "small business" competition
3. Nature and extent of foreign competition

J. Government Relations

1. Assistance from state and federal agencies
2. Tax, regulatory requirements

II. Nature of Problems in the Past

- A. What major problems were encountered in the development of your company?
- B. Were other companies in your industry affected similarly?
- C. What caused these problems?
- D. Were they the result of internal or external factors?
- E. Were they affected by competitive practices?
- F. How could they have been avoided?
- G. At what stage in the company's life did they occur?
- H. What was their significance? How did they affect your operations?
- I. Was it necessary to make major adjustments in your operations?
- J. What corrective action was taken?
- K. How successful was it?
- L. What action was taken to prevent recurrence of these problems?

III. Current Needs

- A. What major problems do you now face?
- B. Are other companies in your industry affected similarly?
- C. What is the cause of these problems?
- D. Are they the result of internal or external factors?
- E. Are they affected by competitive practices?
- F. How could they have been avoided?
- G. What is their significance? How will they affect your operations?

Exhibit F (continued)

- H. Will it be necessary to make major adjustments in your operations?
- I. What action has been taken thus far?
- J. What additional action is required?
- K. Could you use outside assistance?
- L. What action should be taken to prevent recurrence of these problems?

IV. Role of SBA

- A. Have you requested assistance of SBA in regard to your current needs?
- B. Have you ever used the services of SBA? If so, how?
- C. How helpful have SBA services, publications, etc., been in the past?
- D. Would you use SBA services again (based on your past experience)?
- E. How did you first learn about SBA?
- F. What, in your opinion, is the appropriate role of SBA?

V. Future Developments

- A. What do you foresee as the potential of your company?
- B. Can you, within the limits of your capacity, compete with other businesses?
- C. What changes, from expansion, modification, diversification, etc., do you anticipate in your management policies and procedures?