

FIRST LINE MANAGERS

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I INTRODUCTION

I INTRODUCTION

A. SCOPE

- This report is produced by INPUT as part of the Field Service Planning Information Program.
- This is the second major report issued under this subscription service and deals with the role and requirements for first line management within field service organizations.
- This research topic was selected because of high client interest. It was identified by field service organization executives as a critical problem during INPUT's research in support of the multi-client study conducted in 1978, "Maintenance Requirements for the Information Processing Industry, 1978-1983."

B. METHODOLOGY

- Research for this report included a series of 24 interviews with major vendors of data processing equipment.

- Fifteen interviews were conducted with the senior executive who had line management responsibility for the field service organization.
 - Nine interviews were conducted with the Training Director who had responsibility for the management and development of training programs. It was not possible to interview this individual in all companies because the position did not exist.
 - Of the 24 interviews conducted, 7 were in-depth, on-site interviews and 17 were phone interviews.
 - On-site interviews lasted up to two and a half hours and phone interviews about one hour.
 - Because of the nature of the information provided, INPUT agreed to keep the names of the companies interviewed confidential. However, the types of companies interviewed are presented in Appendix B in terms of 1978 annual revenues and types of products. Copies of the questionnaires used are presented in Appendix A.
- INPUT believes that the interview sample represents approximately 20% of the total field service force in the EDP industry.
 - Questionnaire specifications were formed largely from the requirements of clients of the "Field Service Planning Information Program."
 - Supplemental research information has been drawn from INPUT's Market Analysis (MAS) Service Report, "Opportunities in Educational Services," Industry Report Number 15.
 - Inquiries and comments on the information presented in this report are invited from our clients.

II EXECUTIVE SUMMARY

II EXECUTIVE SUMMARY

A. MAJOR FINDINGS

I. STATUS AND IMPLICATIONS

- The following comments are a brief distillation of INPUT's overall interpretation of the current status of first line management performance in the EDP field service community.
- When INPUT carried out its 1978 multiclient study "Maintenance Requirements for the Information Processing Industry," most field service executives said that generally poor performance by first line managers was one of the (if not the) most significant causes of high turnover in their field service organizations.
- In addition, a fairly high percentage of those executives said they were "forced" to promote their best technicians into management slots, whether or not they were qualified for the positions. They claimed that this was the only way they could provide these technically superior people with sufficient financial reward and emotional "strokes" to retain them.

- The results of this study which was conducted in late 1979 do not tend to support these contentions. Most field service executives appeared to be rather pleased with the progress of most of their first line managers, implying that, for many companies at least, the "problem is being worked."
- One of the most telling indicators that things are changing was that, of the 1,250 first line managers who worked for the companies interviewed in this study, the average of their time spent on technical functions (installing, diagnosing, fixing) was less than 5%.
 - This is in sharp contrast to the 1978 study which indicated that a very high percentage of first line managers spent half or more of their time doing straight field service work.
- The evidence is clear that most companies either have or are adopting policies and programs designed to put managers into management jobs, and to provide better management training to people once they are promoted or hired.
 - For example, INPUT found almost total uniformity among executives that human communications skills was the number one attribute looked for in potential first line management candidates, and that this area is the one receiving the most attention in the training programs being implemented or planned.
- This is not to say, however, that there are not wide margins for improvement, or that companies are doing all that they can to better the performance of first line managers.
 - Management training, for example, is usually sporadic.
 - Performance measurement and feedback systems are unevenly and infrequently applied.

- However, on balance, INPUT believes that the industry has made significant strides in improving the first line management functions in the past 12 to 18 months, and that it will continue to improve for the foreseeable future.
- Continued improvement in this area has enormous future implications that should not be overlooked:
 - With the increasing influx of relatively unskilled people into field service, sound direct management is essential to the attainment of adequate productivity levels.
 - Competitive pressure for people is increasing. Outside of financial compensation, which is controlled at corporate levels, the first line manager's talent is the major determinant of people retention.

2. QUALIFICATIONS OF FIRST LINE MANAGERS

a. Academic Qualifications

- Academic qualifications varied among the 15 companies interviewed.
 - Forty-seven percent of the companies accepted personnel into management level positions who were graduates of a junior college or a two year terminal technical school.
 - Forty percent of the companies accepted individuals with a high school diploma and provided them with extensive technical training and on the job experience after they had joined the company.
 - Only two of the companies required their first line managers to have a college degree, either in the physical sciences, computer sciences, or electronic engineering.

- It is expected that this variability will continue to exist within field service organizations and that individual companies will continue to trade off academic qualifications against the effectiveness of their own in-house training programs.

b. Experience Levels

- The average number of years of field service experience required for first line managers among the 15 companies interviewed was 4.7 years.
 - There was no significant difference in years of required experience for first line managers among the three levels of academic qualifications.
- Eighty-six percent of the companies interviewed hired personnel from outside the company directly into management positions. This often creates management problems in integrating these personnel into the existing management structure.

c. Special Qualifications

- In addition to academic qualifications and required experience, there were certain qualitative skills that were required of first line managers.
 - The dominant special qualification stated by all field service executives was people skills; i.e., the ability of the individual to relate to his field engineers, his customers, and the management of the company.
 - These basic human communication skills are difficult to find and many of the companies had a significant part of their management training directed toward the development and improvement of these skills.

- Only 40% of the companies interviewed indicated that the technical skills of the first line manager were of special importance. In many instances the promotion of the most technically qualified field engineer had very negative results.
- Other skills areas mentioned by the field service executives were:
 - Planning and organization skills.
 - Business management skills.
 - Budget control skills.
- As contrasted with other first level management positions within technical organizations, the first line manager within a field service organization must have a much wider range of skills and abilities than his counterpart in other technical organizations.

3. RESPONSIBILITIES OF FIRST LINE MANAGERS

- The characteristics that distinguish a first line manager from other comparable positions within a technical organization are significant.
- These distinguishing characteristics are:
 - The first line manager is usually geographically isolated from the next level of management except for periodic visits.
 - The first line manager is required to interact on a daily basis with a variety of customers with different levels of sophistication and demand.
 - The first line manager is required to supervise a mobile force of field engineers operating at different hours, as opposed to a single shift group all in one physical location.

- The first line manager is required to operate in a reactive environment based on customer demands as opposed to operating on some orderly set of scheduled events that have been planned for him.

a. Span of Control

- The average number of field engineers directly supervised by first line managers among the companies interviewed is 12.2 with a range of from 2-35 field engineers.
- Field service managers, on average, believed that 11 is the ideal number of field engineers that should be supervised by a single first line manager.
- However, two-thirds of the companies interviewed exceeded this number.
- Most companies who found themselves in this position are attempting to reduce the number of field engineers being supervised by first line managers. This is being accomplished either by reorganization of the existing work force or by hiring or promoting additional first line managers.

b. Non-Supervisory Responsibilities

- Allied with span of control is the amount of time first line managers were required to spend performing non-supervisory duties.
 - Sixty percent of the companies interviewed had their first line managers spending an average of 9% of their time in sales support activities.
 - The companies who had first line managers involved in sales support activities uniformly believed that this function is complementary to their field service activities.

- Sixty-seven percent of the companies interviewed had their first line managers spending an average of about 10% of their time in inventory control tasks.
- Only 4 of the 15 companies had their first line managers directly involved in equipment maintenance: more than 5% of their time, except for one company which was understaffed. In this firm some first line managers spend up to half of their time in actual maintenance activities.

c. Recruiting and Personnel Administration

- All of the companies interviewed had the first line manager heavily involved in these activities.
 - Only one of the companies did not have the first line manager active in the recruiting of additional field engineering personnel.
 - First line managers were required to conduct detailed performance evaluations on the field engineers reporting to him.
 - All but four of the companies had these performance evaluations completed on a semi-annual basis.
 - However, there was a low level of participation and review of these performance evaluations by higher management.
 - First line managers were responsible for conducting salary reviews and for recommending salary increases.
 - Most companies provide the first line manager with considerable flexibility in administering raise packages, as long as they were within budgets and corporate guidelines.

4. SELECTION AND IDENTIFICATION

a. Sources of First Line Managers

- The preferred source for first line managers among all field service executives interviewed was from promotion within their own field organization. The main reasons for reliance on this source for first line managers were:
 - There were enough potential candidates within the existing organization.
 - This provided an incentive and growth opportunities within the field service organization.
 - The use of other sources required too much additional technical training.
- The second source was by direct recruiting outside the company by the personnel/industrial relations department. Very few of the companies used outside personnel agencies and those that did rated them as their third or fourth choice.
- The field service executives stated that it is very difficult to move personnel into the field service organization from other organizations within the company. What normally happens is that personnel moves from the field service organization into sales or engineering rather than in the other direction.

b. Identification and Development

- Seventy-three percent of the companies interviewed had an active ongoing program within their field service organization to identify potential first line managers.

- This program was usually accomplished within the field service organization with the active participation of the first line managers and the next level of management.
- Only one-third of the companies interviewed regarded this as a currently significant problem, but those companies that did not have such an ongoing program planned to initiate one in the immediate future.
- However, 86% of the field service executives interviewed indicated that this problem will increase in importance over the next five years. Changes in technology will place more demand on the position as well as the competitive demands of the marketplace.

c. Growth and Demand

- There will be a continuing demand for an increased number of first line managers within field service organizations. Exhibit II-1 provides a per company tabulation of the expected demand for field engineers and first line managers.
 - Of the 15 companies interviewed, the average 1979-1980 increase in the size of their total field service organization is anticipated to be 22%.
 - The planned increase for first line managers is almost as great, with an average expected increase of 19%.

5. COMPENSATION AND EVALUATION

a. Compensation Levels

- As shown in Exhibit II-2, the salary range for first line managers is rather startling:

EXHIBIT II-1

ANTICIPATED DEMAND IN 1980 FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

COMPANY	TOTAL FIELD SERVICE ORGANIZATION		FIRST LINE MANAGERS	
	CURRENT SIZE	1980 PERCENT INCREASE	CURRENT SIZE	1980 PERCENT INCREASE
1	180	8%	15	0%
2	200	75	10	100
3	235	15	14	0
4	306	10	17	10
5	350	17	15	0
6	400	50	20	50
7	450	33	40	25
8	600	15	24	10
9	650	15	30	10
10	850	30	100	30
11	930	9	71	5
12	1,050	30	42	25
13	3,000	8	170	5
14	4,500	7	180	10
15	6,000	6	500	1
AVERAGE PERCENT INCREASE	-	21.8%	-	18.7%

EXHIBIT II-2

CURRENT SALARY RANGES FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF FIRST LINE MANAGERS	CURRENT MONTHLY SALARY RANGES		OTHER COMPEN- SATION
		FROM	TO	
1	15	\$1,500	\$2,250	YES
2	10	1,830	2,830	YES
3	14	1,100	2,400	YES
4	17	1,224	2,212	YES
5	15	1,500	2,250	NO
6	20	1,500	2,667	NO
7	40	2,080	3,300	NO
8	24	1,600	2,600	NO
9	50	2,000	2,600	NO
10	100	1,800	3,700	YES
11	71	1,676	2,424	YES
12	42	1,873	2,500	NO
13	170	N.D.*	N.D.*	YES
14	180	1,915	3,065	NO
15	500	1,580	2,250	YES
AVERAGE	-	\$1,656	\$2,646	-

*N.D. = NO DATA

- Starting salaries ranged from \$1,500 per month to \$2,080 per month, with an average of \$1,675 per month.
- Maximum salaries ranged from \$2,212 per month to \$2,646 per month.
- This extremely wide variability in salary levels is a significant contributing factor in the migration of first line managers to other companies.
- Fifty-three percent of the companies interviewed provided compensation other than salary. This compensation included:
 - Company cars.
 - Annual cash performance bonus.
 - Partial sales commissions.
 - Paid vacation trips.

b. Promotion Increases

- All companies interviewed provided promotion increases to field engineers when they became first line managers.
- The promotion increases ranged from 8-15% with an average increase of about 12%.
- Since the majority of the companies moved a field engineer from an hourly rate to a salaried position at the time he became a first line manager, he usually lost his overtime pay status.
- In some cases this resulted in a net decrease in the individual's salary.

c. Performance Evaluations

- All companies coupled performance evaluations and salary reviews. The majority of the companies accomplish this on an annual basis.
- Performance goals for first line managers were usually established as a base line for evaluating their level of performance.
- However, most executives agree that these performance goals were much easier to establish in qualitative terms than they were to measure in quantitative terms.
- The three consistent areas on which performance goals were established were:
 - Customer satisfaction.
 - Productivity.
 - Employee relations.
- Executives indicated that they were not satisfied with their current performance evaluation methods. The areas of improvement that they would like are:
 - More frequent performance evaluations.
 - Improvement in the specificity of goals.
 - Improvement in the current forms used for reporting evaluations.

- Although these activities would improve current performance evaluation procedures, another recurrent theme expressed by the executives was to provide more frequent and informal communication between the first line manager and the next level of management within the field service organization.

d. Turnover Rate

- Turnover of first line managers and field engineers continues to be a significant problem for most of the companies interviewed.
- Exhibit II-3 provides the turnover rates for both categories of personnel for the last 12 months.
 - The turnover rate for first line managers was, on average, more than half of the turnover rate for the total field service organization: 10% for first line managers versus 17% for the entire organization.
 - The two primary reasons for turnover are:
 - Internal transfers out of field service.
 - Jumps to competitors' field service organizations.
- Although there was some indication by the executives interviewed that little could be done about turnover because of the demand and competitive pressures, the areas that are receiving the most attention are:
 - Improved salary and fringe benefits.
 - Incentive programs.
 - Full time management responsibility.

EXHIBIT II-3

TURNOVER RATES DURING LAST
TWELVE MONTHS BY COMPANIES INTERVIEWED

COMPANY	CURRENT EMPLOYEES	TURNOVER RATE (PERCENT)	NUMBER OF FIRST LINE MANAGERS	TURNOVER RATE (PERCENT)
1	200	15%	10	10%
2	235	36	14	6
3	180	13	15	12
4	350	33	15	33
5	306	18	17	15
6	400	23	20	5
7	600	35	24	20
8	650	20	30	0
9	450	4	40	0
10	1,050	16	42	9
11	930	13	71	0
12	4,500	7	80	10
13	850	6	100	0
14	3,000	10	170	16
15	6,000	11	500	9
AVERAGE	-	17.3%	-	9.6%

6. MANAGEMENT TRAINING

a. Initial Management Training

- Of the 15 companies interviewed, 10 provided initial management training to field engineers when they were promoted to first line managers. The remaining five companies expected field engineers to move into their first management position with no training.
- There was a wide span in the amount of time spent in management training, with a range of from 4 to 45 days.
 - Class sizes were relatively small, ranging from 6 to 25 students.
- Most of the initial management programs are comprised of three elements:
 - Conceptual Skills.
 - Procedural Skills.
 - Human/Communications Skills.
- The human skills area is receiving the most attention. It was also the area receiving the most emphasis in the planning of new training programs.
- Companies used both in-house training departments and outside vendors to provide this initial management training.
- Almost all the field service executives believed that management training would increase in importance over the next five years.
- The primary reasons given for this increase in importance were:
 - Increase productivity.

- Reduce turnover.
- Less skilled personnel and greater demand.
- Competitive pressures.
- Three of the five companies interviewed that were not currently offering initial management training were planning to initiate programs in 1980.

b. Ongoing Management Training

- Only two of the companies had an ongoing program to provide continuing management training to their first line managers.
 - This ongoing training consisted of periodic seminars and workshops on specific management skills as well as an opportunity to reinforce the initial management training objectives.
- The remainder of the companies relied on the next level of management to continue the management training on an OJT basis. While, on the surface, this appears to be a sound vehicle, there is some question regarding its effectiveness because second line managers do not have the time needed to implement an effective program.

B. RECOMMENDATIONS

- Field service executives should conduct a critical review and update of their current job descriptions for first line managers.
 - The purpose of these reviews should be to identify and reassign non-management functions to support personnel in order to provide first line managers with more time for managerial tasks.

- First line managers should be assigned, as a primary task, the ongoing responsibility of identifying other potential first line managers within their organization.
 - First line managers should devote part of their time in the development and training of these potential first line managers.
- Field service executives should examine their current salary ranges to ensure that they are at parity with the rest of the industry.
 - Companies who do not provide comparable salaries can expect high turnover rates.
- Field service executives should consider the development of some type of incentive compensation program which will assist in the long term retention of first line managers.
- Existing performance evaluation methods should be reviewed to determine if they are capable of establishing measurable goals for sustaining and improving performance.
- The evaluation process should be modified to accomplish the following:
 - Increase the frequency of review of the established performance goals. Management attention should not be directed to these performance goals only when they are not being met.
 - Increase the frequency of communication between first line managers and the next level of management.
- Initiate a program to examine in detail the reasons for turnover of first line managers. Information should be collected to determine common reasons and a program established to correct these situations.

- Companies that are currently offering initial management training for first line managers should examine their current curriculum and plan to make modifications to train personnel with less experience and qualifications than the current force of first line managers.

- Companies that do not provide any initial management training for first line managers should initiate such programs immediately.
 - The demand for additional first line managers will negate the continued availability of experienced first line managers.

 - If sufficient training resources do not exist within the company, outside vendors should be used to shorten the lead time.

- All companies should increase the amount of ongoing management training for first line managers. This is particularly critical during the first year.
 - This ongoing training should be conducted as a series of seminars and workshops dealing with specific management topics.

 - These sessions can be conducted on a rotating basis at branch or regional locations.

III QUALIFICATIONS OF FIRST LINE MANAGERS

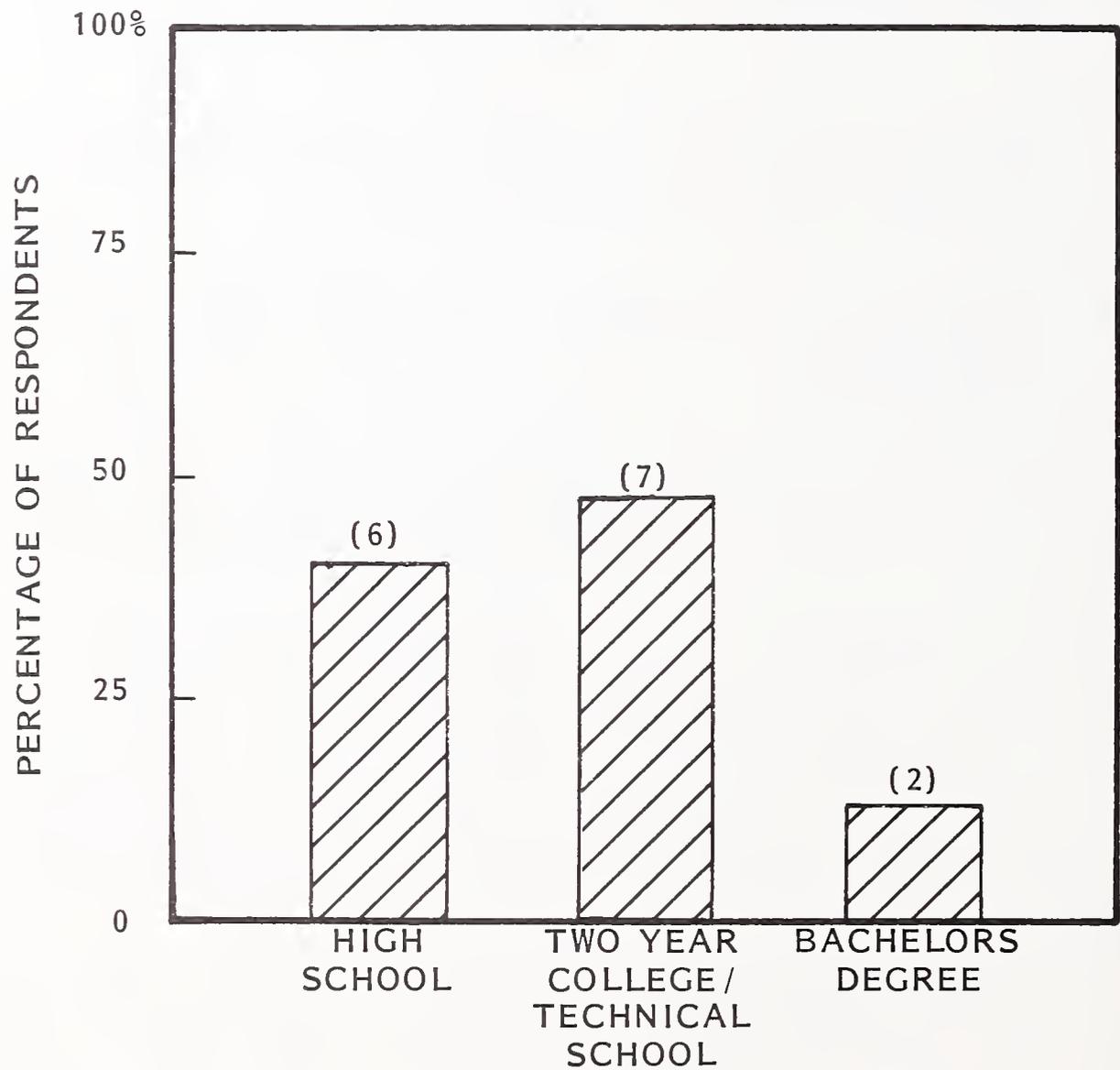
III QUALIFICATIONS OF FIRST LINE MANAGERS

A. ACADEMIC QUALIFICATIONS

- Exhibit III-I presents the distribution of academic qualifications for first line managers among the companies interviewed.
- Only two of the companies required that their first line managers have a college degree.
 - One of the companies would only accept individuals who had an undergraduate degree in electronic engineering or computer sciences.
 - However, this company's approach to recruiting was much broader in the sense that they took the attitude that they were hiring people for long term career development within the company. Functioning in a management position within a field service organization was just one early assignment in a total career development for that individual.
 - The second company would accept any one with a degree in engineering or physical sciences, but was again recruiting for the long term.
- Nearly half (7 of 15) of the companies accepted people into field service with two years of college. They generally sought individuals who were graduates of terminal technical programs from a junior college or technical school.

EXHIBIT III-1

MINIMUM ACADEMIC QUALIFICATIONS FOR
FIRST LINE MANAGERS BY COMPANIES INTERVIEWED



() = NUMBER OF RESPONDENTS

- The remaining 40% (6 of 15) of the companies accepted individuals into their field service organization with high school diplomas and provided them with extensive technical training and on the job experience after they had joined the company.
- It is expected that this variability in academic qualifications will continue to exist within field service organizations and that individual companies will continue to trade-off academic qualifications against the effectiveness of their own in-house training programs in terms of developing the necessary skills to prepare these individuals for entry into the management level of their organizations.

B. EXPERIENCE LEVELS

- All companies require prior experience within a field service organization before placement into a management position. Exhibit III-2 shows the distribution of the years of experience required by the various companies interviewed. This information has been correlated with academic qualifications to see if any relationships exist.
- However, looking at the total sample independent of academic qualifications, the average number of years of experience required is 4.7 years, with a range of from three to eight years.
 - As shown in Exhibit III-2, there appears to be no truly significant differences among the three levels of academic qualifications in terms of years of experience required prior to becoming a first line manager.
- Another way of examining the experience required for a first line management position is in terms of the amount of time that the individual was with the company before being placed in a management position.

EXHIBIT III-2

YEARS OF EXPERIENCE REQUIRED
FOR FIRST LINE MANAGERS BY COMPANIES INTERVIEWED

COMPANY	YEARS EXPERIENCE REQUIRED	ACADEMIC QUALIFICATIONS
1	3	TWO YEARS COLLEGE
2	7	TWO YEARS COLLEGE
3	5	HIGH SCHOOL
4	4	TWO YEARS COLLEGE
5	8	TWO YEARS COLLEGE
6	5	HIGH SCHOOL
7	5	TWO YEARS COLLEGE
8	2	B.S. EE, COMPUTER SCIENCES
9	3	TWO YEARS COLLEGE
10	6	HIGH SCHOOL
11	6	B.S. PHYSICAL SCIENCES
12	5	HIGH SCHOOL
13	5	HIGH SCHOOL
14	4	HIGH SCHOOL
15	3	TWO YEARS COLLEGE

- Only two of the companies required that the individual have prior experience with the company, with one requiring five years of service and the other three years of service.
- The remaining 86% (13 of 15) of the companies are willing to recruit individuals from outside the company directly into a first line management position.
- This policy of hiring outside managers into a field service organization often creates serious problems within the existing organizations.

C. SPECIAL QUALIFICATIONS

- While academic and experience qualifications are a quantitative means of measuring management capabilities, there are a number of subjective qualifications that are required for first line management positions.
- To determine what these subjective qualifications are, each of the field service executives interviewed was asked to specify the most important qualifications a first line manager must possess.

I. PEOPLE SKILLS

- The dominant special qualification that was stated by all the field service executives was people skills; i.e., the ability of the individual to relate to his field engineers, his customers, and the management of the company.
- These communication skills appear to be the most common qualification required of a first line manager.
- Comments of the executives about these people skills are illuminating.

- "Interpersonal skills - relate to his field engineers."
- "Ability to listen, find out what's going on."
- "Ability to deal with clients and employees."
- "Human relations skills, interpersonal communication with field engineers and customer."
- "Good personnel manager - sensitive to people."
- "Motivate his people and keep them motivated."
- "Must be able to relate to his own people and customers."
- "Communicate with field engineers and higher management."
- "People oriented person."
- "Empathy with his field engineers, interested in them and their improvement."
- "Must be able to communicate his ideas."

2. TECHNICAL SKILLS

- Forty percent (6 of 15) of the field service executives interviewed indicated that the technical skills of the first line manager were important.
- It is significant to note that these technical skills were stated in terms of providing direction to his field engineers rather than in the actual performance of maintenance activities.
- Several comments are worthy of note:

- "Must have the technical respect of the field engineers who work for him."
- "As much or more technical knowledge than those managed."

3. OTHER SPECIAL SKILLS

- There are a variety of other special qualifications that were mentioned by the field service executives interviewed. Although it is difficult to classify these other special skills, it is important that they be noted:
 - Planning and organization skills.
 - Business management skills.
 - Budget control skills.
- As contrasted with other first level management positions within technical organizations, the first line manager of a field service organization must have a much wider range of skills and abilities than his counterpart in other technical organizations.
 - Even though these broad demands are made on field service managers, they nearly always earn less than comparable level managers in other organizations, such as marketing or engineering.
 - This dichotomy has its roots in the all too frequent management perception that field service is a second class profession.

IV RESPONSIBILITIES OF FIRST LINE
MANAGERS

IV RESPONSIBILITIES OF FIRST LINE MANAGERS

A. DEFINITION OF FIRST LINE MANAGER

- The first line manager within a field service organization occupies the initial level of responsibility within the management hierarchy and has the direct responsibility for the supervision of a number of field engineers.
- However, in comparing this level of management within a field service organization with comparable levels in other organizational elements, there are some distinguishing characteristics which make this one of the most difficult first level management positions to fill.
- These distinguishing characteristics are important to understand because they have a direct impact on the identification, selection, compensation, training, and supervision of this level of management.
- The characteristics that distinguish this position from other comparable management positions in an engineering or production environment are:
 - The first line manager is usually geographically isolated from the next level of management except for periodic visits.
 - The first line manager is required to interact on a daily basis with a variety of customers with different levels of sophistication and demand.

- The first line manager is required to supervise a mobile force of field engineers operating during different hours, as opposed to a single one shift group all in one physical location.
- The first line manager is required to operate in a reactive environment based on customer demands as opposed to operating on some orderly set of scheduled events that can be planned.

B. LEVEL OF SUPERVISION AND SPAN OF CONTROL

- To determine the span of control for first line managers, respondents were asked to provide information on the number of people they were required to supervise.
- The results of this line of inquiry is presented in Exhibit IV-1. These levels are compared to what field service executives believed was the number of people that a first level manager should supervise.
 - The average number of field engineers actually supervised by the first line managers among the companies interviewed was 12.2, with a range of from 2 to 35 field engineers.
 - Field service executives believed the ideal number should be 11 field engineers per first line manager.
 - When this ideal average is compared with each individual company's actual performance, it is seen that 67% (10 of 15) of the companies interviewed were above the ideal.
- Field service executives in four of the companies interviewed were concerned about this high span of control because it placed excessive demands on the time and abilities of a single person.

EXHIBIT IV-1

COMPARISON OF ACTUAL VERSUS IDEAL SPAN OF CONTROL
FOR FIRST LINE MANAGERS BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF PERSONNEL SUPERVISED		
	ACTUAL		IDEAL
	AVERAGE	RANGE	
1	11	10-12	11
2	15	5-20	12
3	17	10-35	15
4	10	6-15	12
5	18	11-24	16
6	14	10-22	11
7	10	5-13	8
8	8	6-10	8
9	11	8-12	11
10	9	4-15	8
11	14	7-20	15
12	12	8-17	12
13	20	12-30	15
14	8	3-10	9
15	6	2-10	7
AVERAGE	12.2	7.1-17.6	11.3

- Two of the four companies were planning on hiring additional first line managers within the branch to relieve some of the load.
- The two other companies were in the process of a reorganization that would bring the number of field engineers supervised down to a lower number.

C. NON-SUPERVISORY RESPONSIBILITIES

- To determine if first line managers were spending any part of their workday in non-supervisory tasks, field service executives were asked to identify what these tasks were and the amount of time first line managers were required to dedicate to these tasks. The results are presented in Exhibit IV-2.
- Twenty percent (3 of 15) of the companies interviewed had first line managers totally dedicated to their management task.
- Sixty percent (9 of 15) of the companies interviewed had first line managers involved in sales support activities. This ranged from 3% to 20% of their time with an average of about 9% of their time devoted to sales support activities.
- The companies who had first line managers involved in sales support activities uniformly believed that it was complementary to their other field service activities.
- One company interviewed (the one that hired four-year degreed people) had an active program of moving people from the field service organization into the sales organization as a orderly part of career development and regarded this as part of their training.
- Only four of the companies interviewed had first line managers performing actual equipment maintenance.

EXHIBIT IV-2

NON-SUPERVISORY TASKS OF FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

NON-SUPERVISORY TASKS	NUMBER OF COMPANIES	PERCENT OF COMPANIES	PERCENT OF TIME NON-SUPERVISORY TASKS	
			AVERAGE	RANGE
SALES SUPPORT	9	60%	9.3%	5-20%
EQUIPMENT MAINTENANCE	4	26	15.3	2-50
TURNKEY CONTROL	10	66	10.3	3-25

NOTE: THREE COMPANIES INTERVIEWED HAD FIRST LINE MANAGERS PERFORMING NO NON-SUPERVISORY TASKS

- For three of the companies this ranged between 2% and 5% of the first line manager's time and was not very significant.
- The fourth company was "forced" to have the first line manager spend about half of his time in direct equipment maintenance.
 - . This was causing a significant management problem and they were actively trying to recruit additional field engineers to relieve part of this load from the first line manager.
- Sixty-seven percent (10 of 15) of the companies interviewed had first line managers spending an average of about 10% of their time performing inventory control functions. The time spent on this function ranged from 3% to 25% of their time.

D. RECRUITING AND PERSONNEL EVALUATION RESPONSIBILITIES

I. RECRUITING OF FIELD ENGINEERS

- Among the companies interviewed, the first line manager had a heavy time commitment to the recruiting and evaluation of the personnel that reported to him.
- Only one of the 15 companies interviewed did not have the first line manager directly involved in the recruiting of personnel who reported to him.
 - In this company, the District Manager (next level of management) was responsible for all hiring within the district.
 - . However, the first line managers reporting to him have the option to veto an assignment if, in their judgement, the individual was not working out.

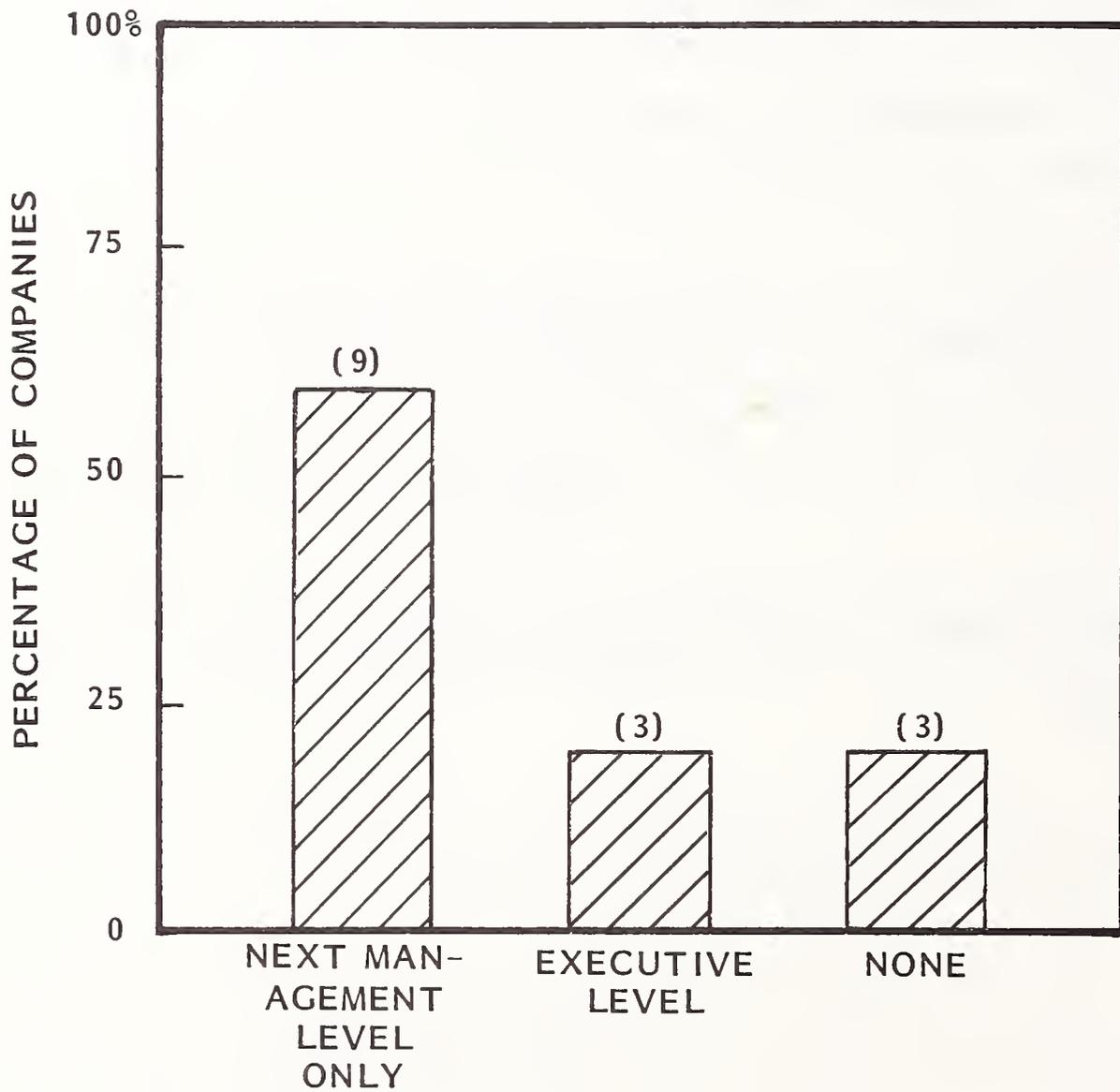
- While the remaining 14 companies interviewed had the first line manager responsible for the recruitment of field engineers for his organization, there is a requirement for additional levels of management approval before the offer was placed.
 - Fifty-three percent (8 of 15) of the companies interviewed required that the approval for the new field engineer be at two levels above the first line manager.
 - Twenty-seven percent (4 of 15) of the companies interviewed required approval one level above the first line manager.
- One of the companies interviewed allowed the first line manager to hire field engineers without additional approval.

2. PERFORMANCE EVALUATION OF FIELD ENGINEERS

- All of the companies interviewed had a formal procedure to be used by first line managers to evaluate the field engineering personnel reporting to them.
- However, the level of involvement of the next level of management in this process was quite variable, reflecting a general lack of attention to this process.
- Exhibit IV-3 shows how frequently senior management is involved in the performance evaluations of the field engineers.
 - As can be seen from this exhibit, the majority of the companies interviewed did not have active participation in this performance evaluation process beyond the next level of management.
 - Three of the companies left the first line manager completely on his own for preparing and conducting the performance evaluation interview with the field engineer.

EXHIBIT IV-3

MANAGEMENT LEVEL INVOLVEMENT IN
PERFORMANCE EVALUATION CONDUCTED BY
FIRST LINE MANAGERS BY COMPANIES INTERVIEWED



() = NUMBER OF RESPONDENTS

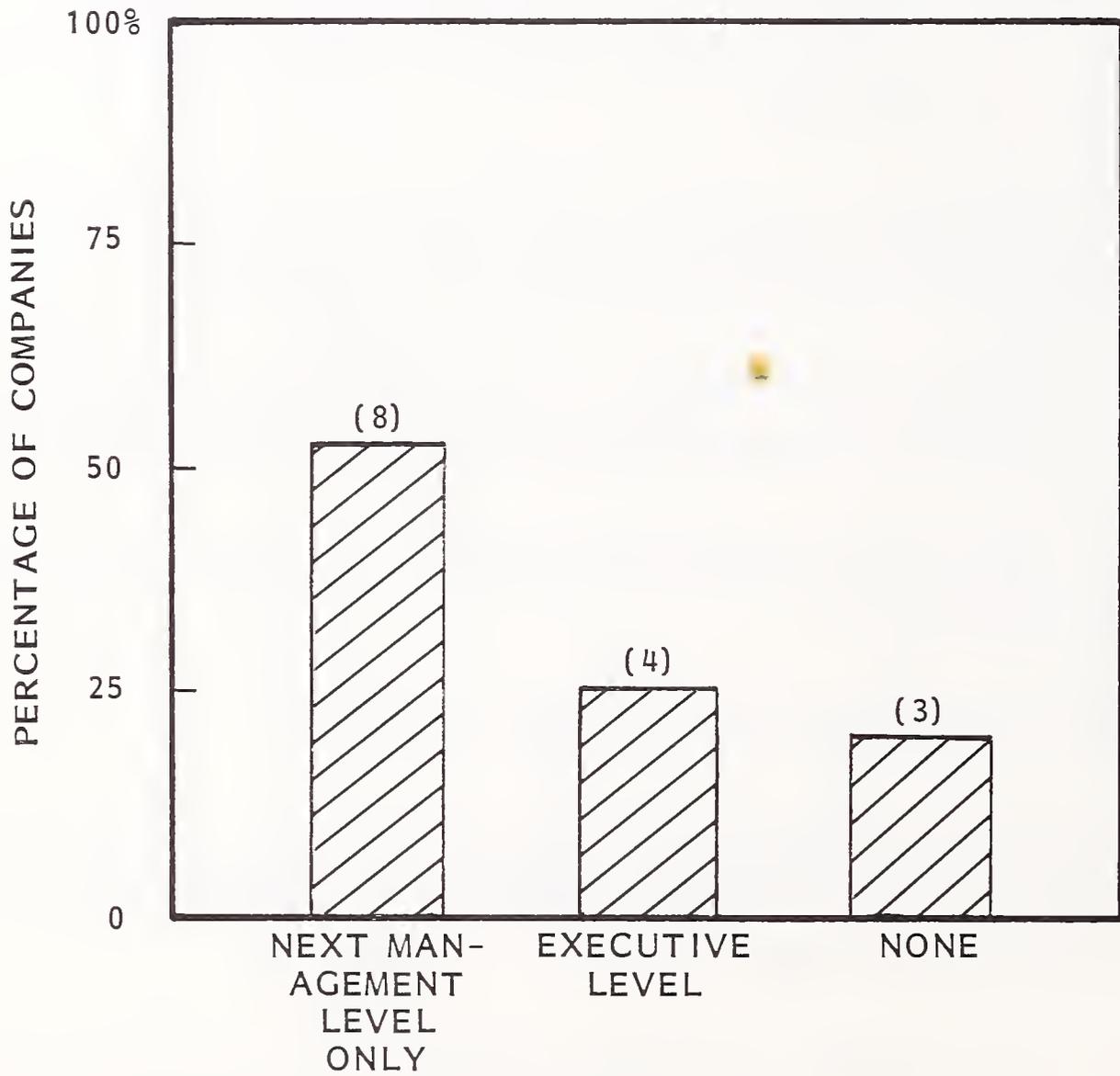
- Three of the companies had an active executive level involvement in the performance evaluation of the field engineers. The purpose of this participation was to assist and direct the first line manager with the performance evaluation.
- One of the companies used the performance evaluation process as an active part of the process of identifying key employees in the field location that should be given special attention by the executive level to ensure their growth and retention.
 - The field service executive used this method to identify the people he should meet with during his periodic trips to field locations.
- Exhibit IV-4 shows the frequency with which first line managers were required to conduct performance evaluations of their field engineers.
 - Seventy-three percent (11 of 15) of the companies interviewed conducted these performance evaluations on a semi-annual basis.
 - The remaining companies conducted performance evaluations on an annual basis.

3. SALARY ADMINISTRATION OF FIELD ENGINEERS

- The level of participation of the first line manager in the administration of salaries for the field engineers reporting to him was almost identical throughout the interview sample.
 - It is basically a top-down approach, with the executive level establishing an overall salary package for the total field service organization. The salary package was then apportioned among the various field service locations and each first line manager was given a budget within which he was required to operate.

EXHIBIT IV-4

MANAGEMENT APPROVAL LEVEL OF
SALARY ADMINISTRATION CONDUCTED BY
FIRST LINE MANAGERS BY COMPANIES INTERVIEWED



() = NUMBER OF RESPONDENTS

- Operating within this budget, the first line manager prepares a set of salary recommendations that is reviewed by different levels of management.
- If the recommended raises were within the established budget, then various review and approval levels were required as shown in Exhibit IV-4.
 - The majority of the companies required a review only by the next level of management.
 - Four required that the total raise package be approved at the division or corporate level.
 - Three companies allowed the first line manager almost complete independence in administering the salary package with no further approval levels required if the proposed raises were within the prescribed budget.
- All companies interviewed required that any recommended salary increases that exceeded corporate guidelines have approval at the headquarters level.

V SELECTION AND IDENTIFICATION OF FIRST
LINE MANAGERS

V SELECTION AND IDENTIFICATION OF FIRST LINE MANAGERS

A. SOURCES OF FIRST LINE MANAGERS

- In order to determine the primary sources of first line managers, executives were asked to rate the value to them of a series of potential sources. The results are presented in Exhibit V-1.
 - All companies preferred to recruit from within.
 - It is interesting to note that most companies preferred to hire from the outside as a second choice rather than accept an internal transfer.
- None of the companies interviewed rated the personnel/industrial relations organization higher than their second source which was used by 12 of the 15 companies.
- The reasons given for going outside through the personnel/industrial relations organization were:
 - Field service was experiencing significant growth and sufficient personnel were not available from within the current organization.
 - Special skills were required that did not exist within the current organization.

EXHIBIT V-1

RANKING OF SOURCES FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

SOURCE	PERCENT/NUMBER OF COMPANIES RATING							
	FIRST		SECOND		THIRD		FOURTH	
	PER-CENT	NUMBER	PER-CENT	NUMBER	PER-CENT	NUMBER	PER-CENT	NUMBER
EXISTING FIELD SERVICE ORGANIZATION	100%	15	-	-	-	-	-	-
OTHER COMPANY ORGANIZATIONS	-	-	20%	3	33%	5	6%	1
OUTSIDE HIRES	-	-	67%	10	12%	2	-	-
OUTSIDE HIRES FROM PERSONNEL AGENCIES	-	-	-	-	6%	1	20%	3

- Only four of the companies interviewed used outside personnel agencies for the recruitment of first line managers.
 - Three ranked it as their last choice.
- Nine companies did look to other company organizations, (such as engineering and sales) as a source of first line managers.
 - Two ranked it as their second choice.
 - Five ranked it as their third choice.
 - One ranked it as its last choice.
- The field service executives indicated that it was very difficult to move personnel into the field service organization from other organizations within the company. It was indicated that field service management assignments did not lead to as rapid advancement as sales and engineering.
- One company interviewed had a career development plan for individuals that required them to rotate between sales, engineering, and field service in order to develop a much broader experience base.

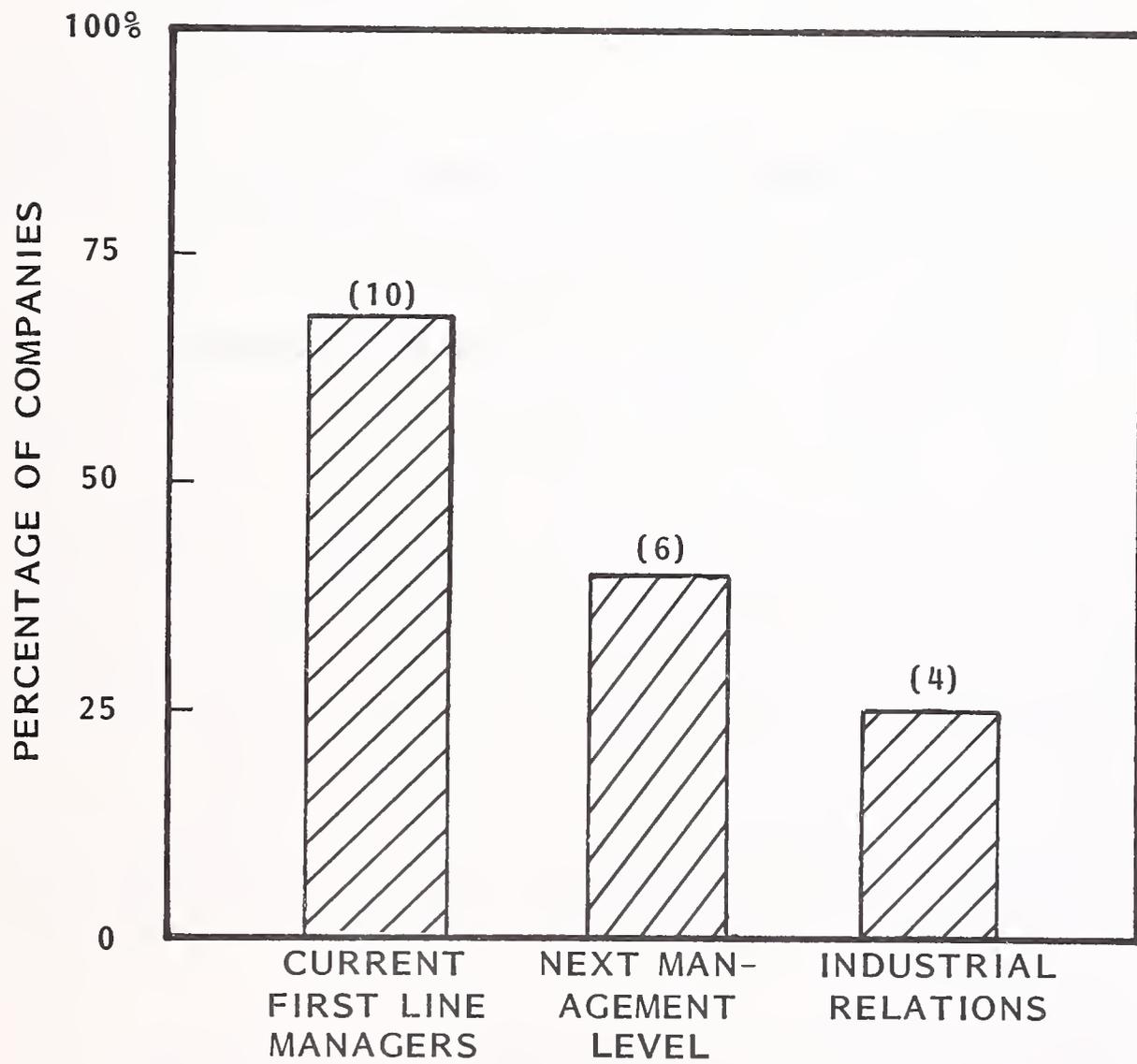
B. IDENTIFICATION AND DEVELOPMENT

- Since the existing field service organization appears to be the primary source for potential first line managers, the companies were asked to cite the management mechanisms by which they identified and developed potential first line managers.
- Seventy-three percent (11 of 15) of the companies interviewed had an active ongoing program to identify potential first line managers.

- Exhibit V-2 shows the involvement of organization elements within the company in the identification of potential first line managers.
 - This exhibit shows it is almost an exclusive field service management function. Only four of the companies utilized the services of the personnel/industrial relations organization.
 - One company had a very active participation by the industrial relations/personnel organization. Field service management identified the individuals and the personnel organization spent considerable time in the field interviewing and evaluating potential candidates.
 - Industrial relations would then develop a specific plan for each individual that would begin his development as a first line manager.
- At all companies, the identification of potential first line managers was primarily the responsibility of the field service management group, and is a primary management objective.
 - Ten of the companies interviewed required each first line manager to identify his replacement.
 - The first line manager was then required to work with this individual in order to prepare him for a first line management position.
 - This was usually accomplished by the first line manager assigning specific supervisory and planning tasks to the individual and working with him in accomplishing it.
- Six of the companies interviewed had the next level of management involved in the identification of first line managers.

EXHIBIT V-2

INVOLVEMENT OF VARIOUS ORGANIZATIONS
IN IDENTIFICATION OF FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED



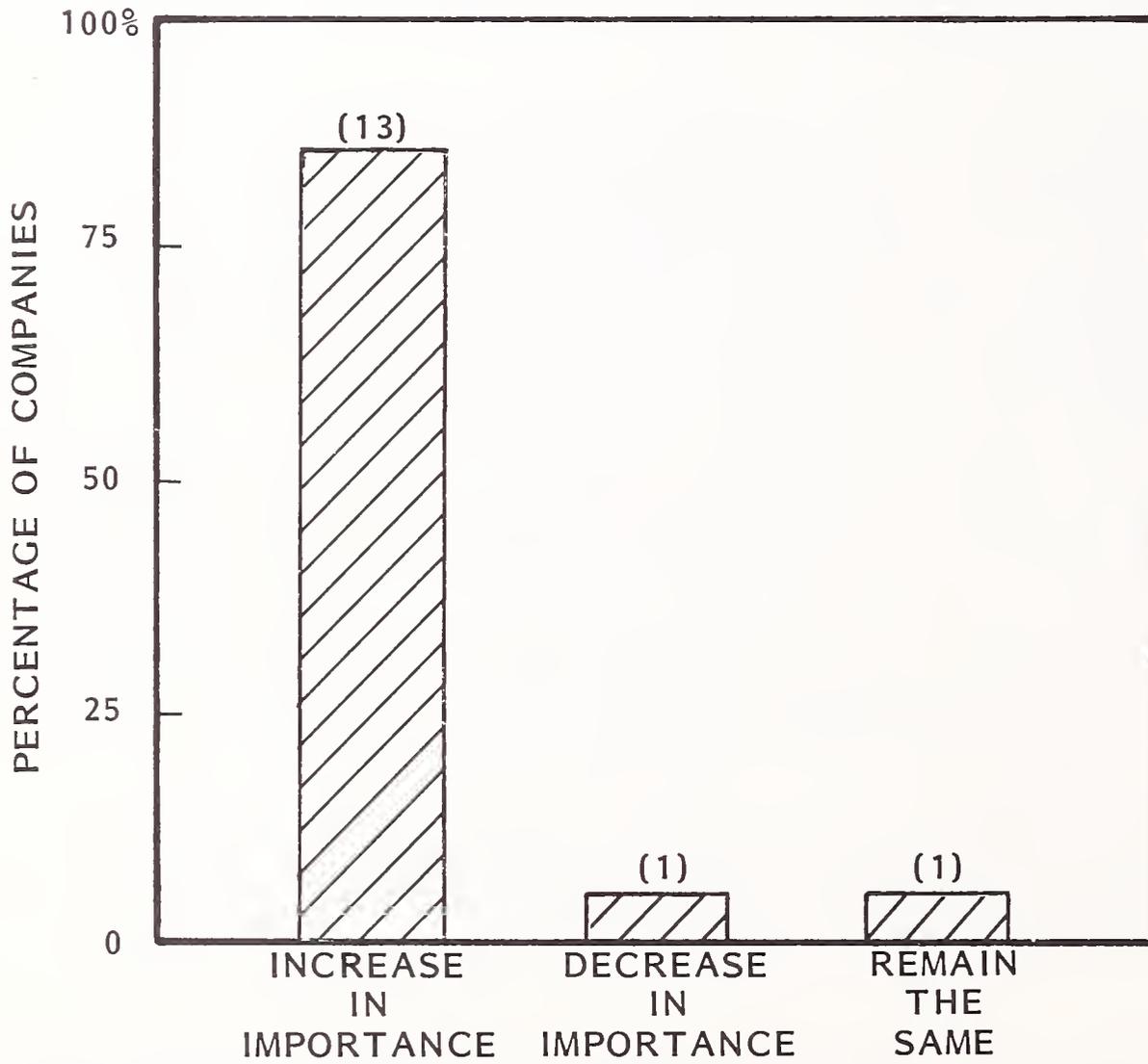
() = NUMBER OF RESPONDENTS

- Although this next level of management did not work as actively with these candidates, he usually would spend additional time with these individuals during his periodic office visits to review their progress.
- The greatest significance of the involvement of this next level of management was that it provided "special" recognition of these individuals, giving them an incentive for continued development.
- One of the companies interviewed had developed an intermediate position with some supervisory responsibility prior to an actual first level management assignment.
 - This position was that of assistant to the first line manager and permitted the candidate to get significant exposure to the position under the guidance of an experienced person.
- None of the companies interviewed used any type of psychological testing to determine the suitability of field engineers for first level management positions.
- INPUT does not believe this type of testing would be of significant value.
- Only one-third (5 of 15) of the companies interviewed considered the identification of potential first line managers as a significant problem.
- Three of these five companies were beginning to initiate active programs to correct this significant management deficiency.
- Their comments about planned management actions are important.

- "We have traditionally advanced the best technical people with very poor results. We are now getting up a review board that will meet with potential first line managers. At these review board meetings the field engineers will have an opportunity to sell themselves to the field service management as potential first line managers."
- "We will soon begin a process whereby field engineers are identified as potential first line managers and we will begin to train them so they will be ready when the positions open up. The other aspect of this problem is to be sure that we have a management slot for them when they are ready to be promoted or they will be snapped up by the competition."
- "Management reviews are being conducted to better understand and train field engineers for this position. We believe that a more qualified person is now required for this (management) job that we previously thought."
- As seen in Exhibit V-3, there is a shift in attitude of the importance of selection and identification of first line managers over the next five years.
- Eighty-six percent (13 of 15) of the field service executives indicated that this problem will increase in importance over the next five years.
- Their comments indicate not only an increased demand, but a change in the technology that may place more complex demands on this position. There is also some indication of the competitive demands of the marketplace.
- "Maintenance will become more complex and greater management skills will be needed - with less skilled field engineers needing better managers."
- "There will be greatly different products, so first line managers will have to train them (the field engineers). As the field engineers will

EXHIBIT V-3

IMPORTANCE OF IDENTIFICATION OF FIRST LINE MANAGERS
DURING NEXT FIVE YEARS BY COMPANIES INTERVIEWED



() = NUMBER OF COMPANIES

have less experience, will have to have better managers to control them."

- "It will be a changing world for managers - new technology and different types of field engineers - younger and more willing to change jobs."
 - "Will be moving software/hardware maintenance together so will require more skilled managers."
 - "There will be less qualified field engineers moving into management positions, so more training will be needed just to bring them up to today's level."
 - "The demand will be greater. Technical schools provide no training in management. It will be up to individual companies."
 - "Will be a shortage and a higher skill level will be required."
 - "Will have less qualified field engineers. As the demand increases, the skill of the manager will need to be greater."
 - "Up to now only technical people as managers - must go to a real manager who can manage both the field engineers and the customer."
 - Will require even more management skills rather than technical -must be able to manage people to get the job done."
- As can be seen from these comments the first level management position is receiving more attention and the expectation among the executives interviewed is that both the numerical demand and the skill levels required to accomplish this management function will be significantly greater than today.

C. GROWTH AND DEMAND

- There will be a continued demand for first line managers within field service organizations.
- Exhibit V-4 provides a per company tabulation of the expected demand and rate of growth for both first line managers and field engineers.
- As can be seen in this exhibit, the need for both types of personnel will be significant and will place extreme demands on most of the organizations to meet these expansion goals.
 - The expected increase in the number of field engineers ranged from 6% to 50%, with an average expected increase of 21.8%.
 - The expected increase in the number of first line managers was slightly less, with a range from zero to a 100% and an average increase of 18.9%.
 - The company that was expecting to double its number of first line managers was relatively small with a current base of only ten first line managers.
 - However, in real numbers, the 15 companies interviewed were planning on hiring or promoting an additional 135 first line managers in 1980.
- The anticipated demand for first line managers among the companies interviewed was created by a number of reasons.
 - The primary reason for the increased demand for first line managers was an expanding business base. This was indicated by 11 of the 14 companies interviewed.

EXHIBIT V-4

ANTICIPATED DEMAND IN 1980 FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

COMPANY	TOTAL FIELD SERVICE ORGANIZATION		FIRST LINE MANAGERS	
	CURRENT SIZE	1980 PERCENT INCREASE	CURRENT SIZE	1980 PERCENT INCREASE
1	180	8%	15	0%
2	200	75	10	100
3	235	15	14	0
4	306	10	17	10
5	350	17	15	0
6	400	50	20	50
7	450	33	40	25
8	600	15	24	10
9	650	15	30	10
10	850	30	100	30
11	930	9	71	5
12	1,050	30	42	25
13	3,000	8	170	5
14	4,500	7	180	10
15	6,000	6	500	1
AVERAGE PERCENT INCREASE	-	21.8%	-	18.7%

- There was also internal restructuring of existing field service organizations that created the growth levels in 1980.
 - Two of the companies were in the process of restructuring their field service organization from a geographic to a product orientation. This was creating an expanded organization within the various field offices with additional first line managers needed at the same location.
 - Although this would increase the size of the management force, it was considered a necessity because of the complexity of the products to be maintained. It was not believed that the same field organization would be capable of providing customer acceptable levels of maintenance for all the product lines in the field.
 - Three of the companies were increasing the number of first line managers to reduce the ratio of field engineers to first line managers.
- It was interesting that two of the companies that were not planning any increase in the number of first line managers had restructured the responsibilities of the first line managers. The essence of this restructuring was to relieve the first line manager of administrative, non-management tasks to provide him with more time to work with the field engineers.

VI COMPENSATION AND EVALUATION OF
FIRST LINE MANAGERS

VI COMPENSATION AND EVALUATION OF FIRST LINE MANAGERS

A. COMPENSATION LEVELS

- Exhibit VI-1 provides a tabulation of the salary ranges for first line managers for 14 of the 15 companies interviewed. One of the companies declined to provide this information.
 - Starting salaries for first line managers ranged from \$1,500 per month to \$2,080 per month with an average among the 14 companies of \$1,675 per month.
 - There was a 39% difference among the companies in terms of the minimum starting salary paid to first line managers.
 - Maximum salary levels for first line managers ranged from \$2,212 per month to \$3,700 per month with an average among the 14 companies of \$2,646 per month.
 - This represents a 67% difference among the companies in terms of the maximum salary that a first line manager could achieve at that level.
- This wide variability in salary levels is a significant contributing factor in the migration of first line managers to other companies.

EXHIBIT VI-1

CURRENT SALARY RANGES FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF FIRST LINE MANAGERS	CURRENT MONTHLY SALARY RANGES		OTHER COMPEN- SATION
		FROM	TO	
1	15	\$1,500	\$2,250	YES
2	10	1,830	2,830	YES
3	14	1,100	2,400	YES
4	17	1,224	2,212	YES
5	15	1,500	2,250	NO
6	20	1,500	2,667	NO
7	40	2,080	3,300	NO
8	24	1,600	2,600	NO
9	50	2,000	2,600	NO
10	100	1,800	3,700	YES
11	71	1,676	2,424	YES
12	42	1,873	2,500	NO
13	170	N.D.*	N.D.*	YES
14	180	1,915	3,065	NO
15	500	1,580	2,250	YES
AVERAGE	-	\$1,656	\$2,646	-

*N.D. = NO DATA

B. OTHER COMPENSATION FORMS

- Fifty-three percent (8 of 15) of the companies interviewed provided additional compensation to first line managers beyond salary.
 - It was generally considered that this additional compensation was an important factor in motivating and retaining the managers.
- The most common form of additional compensation was to provide a company car for first line managers. This was done by five of the companies interviewed.
 - Two of the companies provided this company car in addition to bonus compensation.
 - One company established expected performance levels for their first line managers. If these performance levels were achieved, the first line manager would receive an annual bonus of between \$2,000 to \$3,000.
 - Two of the companies who used their first line managers in sales support roles in conjunction with local sales personnel had established a program that allowed the first line manager to share in the sales commissions.
 - One company established performance goals, and if these goals were met, the first line manager was provided with a free vacation trip for two. These vacation trips were usually planned in conjunction with an annual sales and field service meeting.
 - One company provided overtime pay to their first line managers. This is unusual since first line managers are normally salaried positions.

C. PROMOTION INCREASES

- As shown in Exhibit VI-2, all of the companies provided salary increases to field engineers who were promoted to first line managers.
 - These increases ranged from 8-17%, with an average increase of just over 12%.
- Since the majority of the companies moved a field engineer from an hourly position to a salaried position at the time he became a first line manager, he usually lost his overtime pay status.
 - In some cases, this meant that promotion to a first line management position, actually resulted in a lower salary than that received as a field engineer!

D. PERFORMANCE EVALUATION

- All companies interviewed coupled salary increases with performance evaluations.
- The frequency of these performance evaluations is shown in Exhibit VI-3, with the majority of the companies conducting these activities on an annual basis.
- As shown in Exhibit VI-4, the percent increase in salary for the last performance evaluation for the companies interviewed ranged from 5-20%, with an average increase of almost 10%.
- At the time of the performance evaluation a set of performance goals were established for the first line manager by the next level of management within the field service organization.

EXHIBIT VI-2

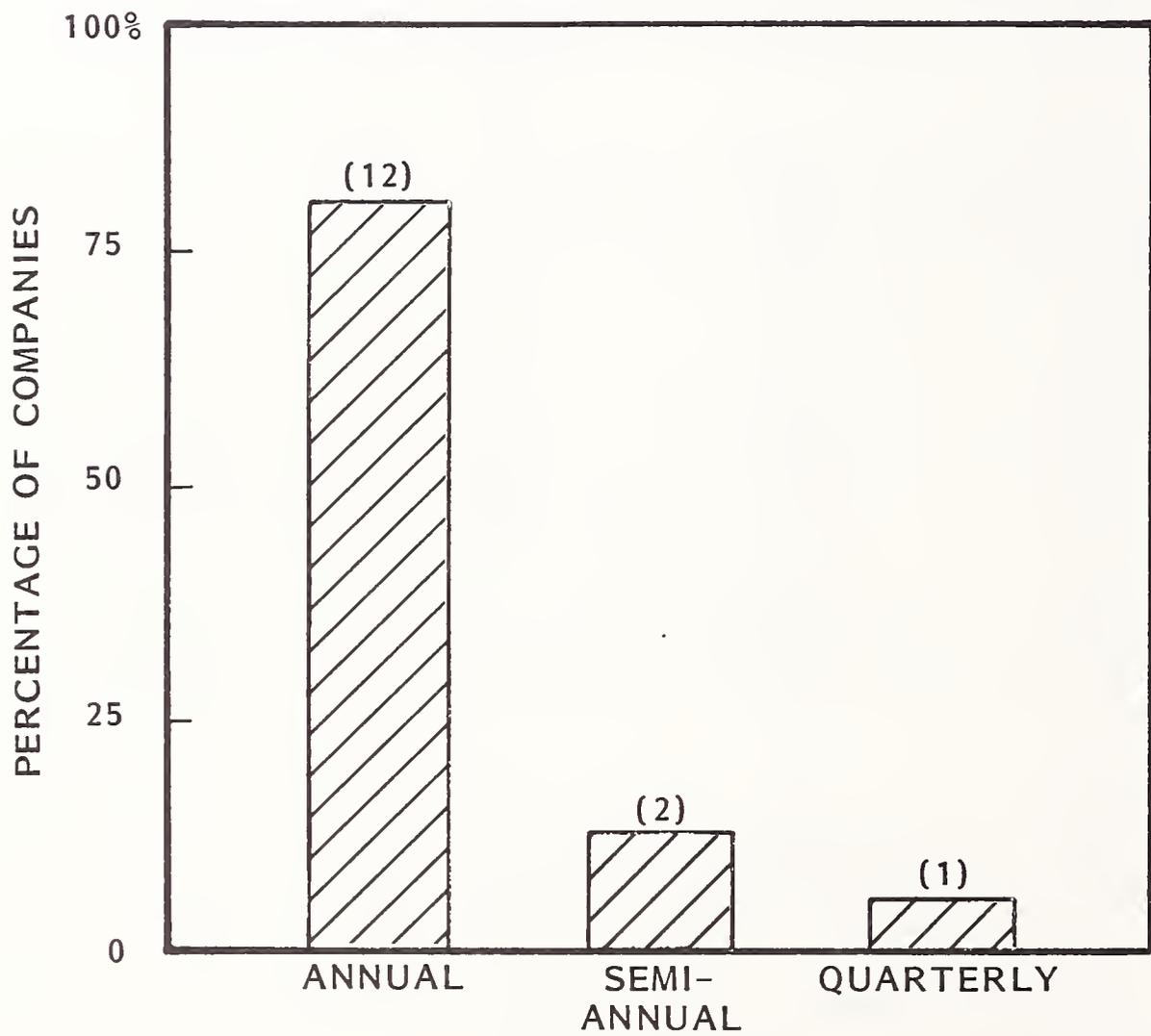
PERCENT SALARY INCREASE AT PROMOTION TO
FIRST LINE MANAGER BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF FIRST LINE MANAGERS	PROMOTION SALARY INCREASE		
		AVERAGE	RANGE	
			FROM	TO
1	15	10%	N.D.*	N.D.*
2	10	17	N.D.*	N.D.*
3	14	10	9%	12%
4	17	10	10	15
5	15	10	N.D.*	N.D.*
6	20	15	10	20
7	40	15	10	18
8	24	10	N.D.*	N.D.*
9	50	8	5	10
10	100	12	10	15
11	71	20	N.D.*	N.D.*
12	42	15	13	25
13	170	10	N.D.*	N.D.*
14	180	10	N.D.*	N.D.*
15	500	13	12	15
AVERAGE	-	12.3%	9.8%	16.2%

*N.D. = NO DATA

EXHIBIT VI-3

FREQUENCY OF PERFORMANCE EVALUATIONS
OF FIRST LINE MANAGERS BY COMPANIES INTERVIEWED



() = NUMBER OF COMPANIES

EXHIBIT VI-4

PERCENT SALARY INCREASE AT LAST SALARY REVIEW
FOR FIRST LINE MANAGERS BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF FIRST LINE MANAGERS	LAST SALARY INCREASE		
		AVERAGE	RANGE	
			FROM	TO
1	15	10%	8%	14%
2	10	9	6	14
3	14	10	7	13
4	17	9	5	12
5	15	10	9	13
6	20	10	8	15
7	40	15	8	19
8	24	8	7	10
9	50	7	5	9
10	100	10	7	14
11	71	9	7	11
12	42	12	8	16
13	170	10	0	17
14	180	9	3	17
15	500	15	8	19
AVERAGE	-	9.8%	6.2%	14%

- There was considerable variability in these goals and one of the major problems that upper management had to deal with was the qualitative nature of the goals. However, stated goals generally fall into the following categories.
 - Customer Satisfaction. Customer satisfaction was mentioned by ten of the companies interviewed. It was sometimes expressed as "quality of service."
 - It was stated that this was a difficult goal to measure and that many times it was only measured in a negative way, when customer complaints had escalated to the next level of management.
 - One company mailed out semi-annual questionnaires to all their accounts to have them rate and evaluate the quality of maintenance service they had been receiving. The results of this survey were used during the performance evaluation interview.
 - Another company had a very simple criterion for measuring the level of customer satisfaction. Each account was evaluated to determine if it could be used as a reference when the sales force was attempting to make a sale to a new account.
 - Productivity. While customer satisfaction is important, the amount of resources expended to achieve those levels of satisfaction were also rated as an important performance goal for the first line manager and the organization that he supervised.
 - Although ten of the companies indicated that this was one of the performance goals, this was again an extremely difficult goal to measure.

required to develop these individuals by giving them special supervisory and planning assignments that could be used as an early measure in evaluating their management potential.

- One company has Affirmative Action goals that managers are required to meet.
- As indicated earlier, the majority of the companies interviewed only had formal reviews of the performance goals on an annual basis.
- However, if any of the performance goals were not being met, action was usually taken by the next level of management to determine the nature of the problem. This usually took the form of face to face meetings at which the specific problem was reviewed and a course of action established to correct the problem.
 - If the problem continued on for an extended period of time, the first level manager received additional help from the next level of management in resolving the situation.
- It was interesting to note that all of the companies appeared to deal with this problem in a positive manner. There was little or no punitive action taken by the next level of management.
 - This attitude was taken because of a fear of losing the employee at a time when qualified managers are scarce.
- When it was determined by senior management that the first line manager's performance would continue to be unsatisfactory, the usual action was to effect a transfer rather than terminating the employee.
- In conclusion, INPUT believes that formal performance reviews of first line managers need to be carried out on a quarterly, or at least on a semi-annual, schedule. The more typical annual review procedure is "too little, too late."

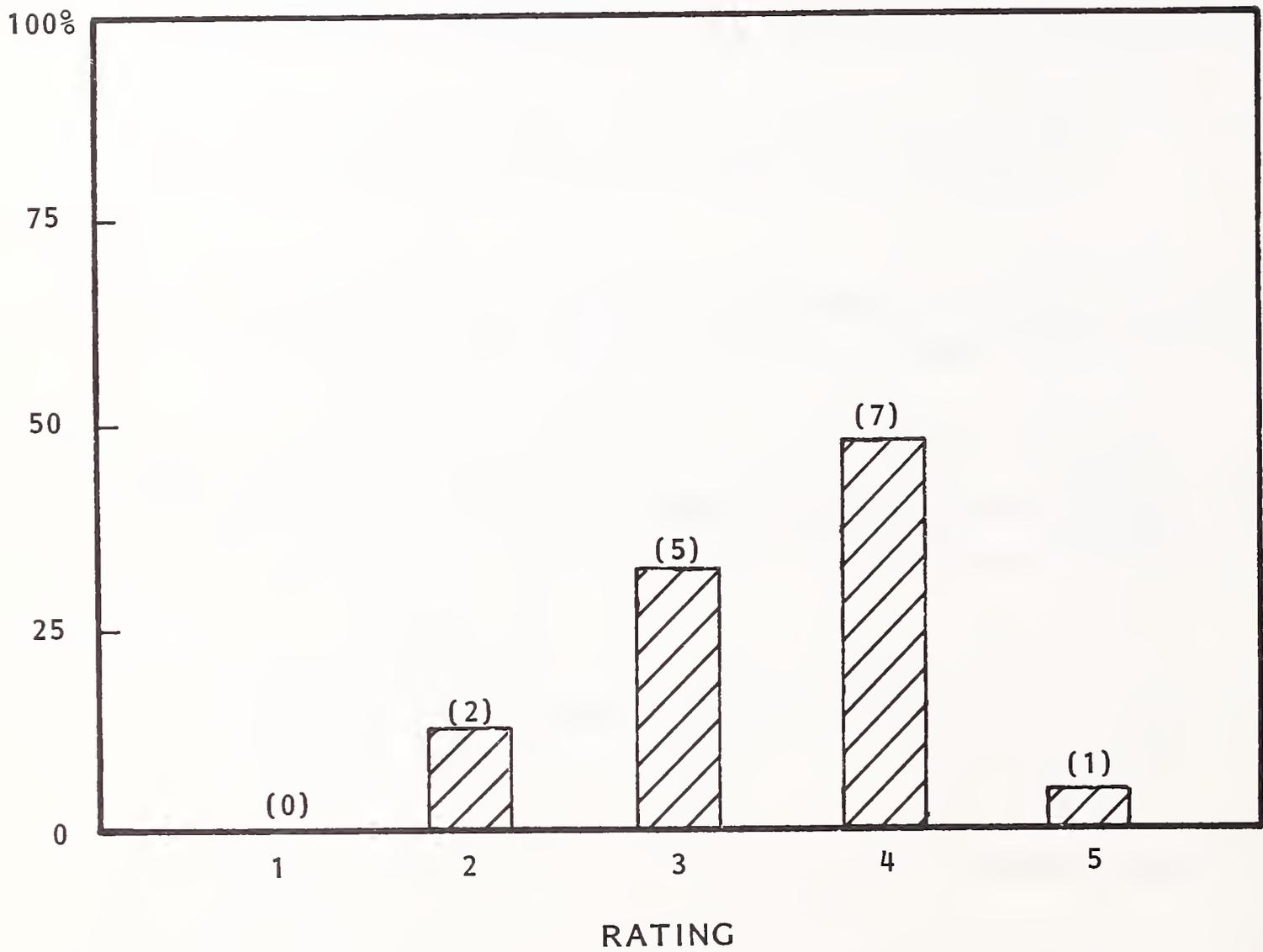
- With the review period covering a fairly short period of time, like three months, performance objectives can be more easily stated, monitored, and measured. In addition, near term problems can be anticipated much more easily and remedial action taken before a problem gets out of hand.

E. EFFECTIVENESS OF PERFORMANCE EVALUATIONS

- In order to determine the effectiveness of current performance evaluation procedures, field service executives were asked to rate their current procedures. The results of this rating is presented in Exhibit VI-5.
 - On a scale of one to five the average rating of current performance evaluation was 3.2, which indicates an average level of satisfaction.
 - Only one of the companies interviewed rated their performance evaluation procedure as a five.
- Associated with this formal rating of their performance evaluation procedures, field service executives were asked to describe the areas of improvement they would like to see in their current procedures.
- Their comments generally had to do with the timeliness with which information was fed back to first line managers and the difficulty in setting measurable goals.
- Representative comments from the field service executives are:
 - "Need more frequent informal meetings to review performance. Need to know more quickly if there are problems."
 - "Would like more candid evaluations and comments, both by first line manager and regional manager."

EXHIBIT VI-5

RATING OF CURRENT PERFORMANCE EVALUATION
PROCEDURES OF FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED



1 = LOW, 5 = HIGH

() = NUMBER OF COMPANIES

- "Need more communication between first line manager and regional manager - the need is to understand and improve rather than a formal inquisition."
 - "More objectivity in the review - sometimes accomplishments not based on goals - up to the manager to choose what to describe."
 - "Evaluations are only vague and general. They need specific goals and specific measures of achievement. Present system is of little use."
 - "Would like specific goals which can be quantitatively measured. This is very difficult to do."
 - "More specific quantitative goals - take the existing goals and set precise ways of measuring performance."
 - "Would like a narrative comparison of goals to objectives rather than the form currently used."
 - "Appraisal form not specific to the first line manager. Need a specific form for this function, not just general categories."
- As can be seen from the previous comments, the area of performance evaluations for first line managers is an area that requires more attention and could effect significant improvement in field service organizations.
 - Of the companies interviewed, 87% (13 of 15) conducted formal exit interviews with first line managers.
 - However, the participation in these exit interviews among the organizational elements within the company varied.
- In four of the companies interviewed, the exit interviews were conducted by the industrial relations/personnel organization.

Comments about the role of this organization during the exit interview are revealing.

- . "Try to establish a pattern, and if there is, recommend (to management) steps to correct it."
 - . "They complete a questionnaire which is tabulated and used in designing new (personnel) programs."
 - . "Try to identify what people in this position are looking for and what they dislike."
- In five of the companies interviewed the field service executive participated in the exit interview in conjunction with the first line manager's immediate supervisor.
 - Again the thrust of these interviews was to determine what the problem was and to establish a program to correct the existing situation.
 - Although exit interviewing is an established technique within industry for examining some aspects of personnel attrition, there is serious question as to whether meaningful information can be collected in such a process. Management is usually dealing with a person who has already reached a decision and may not necessarily be candid about his motivation for leaving.
 - To examine this question further, field service executives were asked what could be done to retain first line managers.
 - Three of the field service executives believed that little could be done because of the high demand and the pressure from competition.
 - However, the comments of some of the other executives interviewed dealt with salaries, training and recognition and are worth considering.

- "Make sure salary has parity with industry, provide management training inside and outside to keep them skilled and motivated."
 - "Higher salaries and better 'bennys.' Make their life easier. Give them more recognition."
 - "Provide them with incentive plans based on performance."
 - "Create career paths for first line managers. Keep salaries adjusted and provide management training."
 - "Training, review more frequently, have them participate in the decision process."
 - "Try to be sure the routine activities are taken off his back. Make him a manager, not a paper pusher. Try to take the frustration out of his job."
- With the expectation that more general management attention will be directed toward field service organizations as profit producers, many of the ideas expressed by the executive interviewed may create a conflict situation. However, remedial action that modifies current personnel practices will be less expensive than continually identifying, hiring, and training new first line managers.

F. TURNOVER RATES

- Turnover of first line managers and field engineers continues to be a significant problem for most of the companies interviewed.
- Exhibit VI-6 provides the turnover rates for both categories of personnel during the last 12 months.

EXHIBIT VI-6

TURNOVER RATES DURING LAST
TWELVE MONTHS BY COMPANIES INTERVIEWED

COMPANY	CURRENT EMPLOYEES	TURNOVER RATE (PERCENT)	NUMBER OF FIRST LINE MANAGERS	TURNOVER RATE (PERCENT)
1	200	15%	10	10%
2	235	36	14	6
3	180	13	15	12
4	350	33	15	33
5	306	18	17	15
6	400	23	20	5
7	600	35	24	20
8	650	20	30	0
9	450	4	40	0
10	1,050	16	42	9
11	930	13	71	0
12	4,500	7	80	10
13	850	6	100	0
14	3,000	10	170	16
15	6,000	11	500	9
AVERAGE	-	17.3%	-	9.6%

- The turnover rate for first line managers was about one-half of the turnover rate for the total field service organization of 17.3%, as contrasted to only 9.6% for first line managers.
 - There were dramatic ranges in terms of turnover in both the total organization and first line managers. The total field service organization turnover rate was from 6% to 36%.
 - First line manager turnover rate ranged from zero to 33%. Four of the companies interviewed experienced no turnover during the last 12 months for first line managers.
- There is no correlation between the size of the organization and the turnover rates. However, the lower the ratio of field engineers to managers, the lower the turnover rate tended to be, although there are some exceptions to this statement.
 - Field service executives were asked to identify where first line managers went when they left their organization.
 - Most jumped to the competition.
 - Some transferred to other departments, usually sales or engineering.

VII MANAGEMENT TRAINING

VII MANAGEMENT TRAINING

A. ANALYSIS OF MANAGEMENT TRAINING

- In order to determine the type and amount of management training being provided to first line managers, part of the interview with the field service executive concentrated on this area.
 - This interview was augmented with a second interview that was conducted with the training director in those companies that provided management training for first line managers.
 - The purpose of this second interview was to obtain more detailed information about the training programs conducted.

B. INITIAL MANAGEMENT TRAINING

- Of the 15 companies interviewed, only ten provided initial management training to field engineers when they were promoted to first line managers. The remaining five companies expected field engineers to move into their first management position with no training.

- Their general attitude was that they would develop the skills while they were learning the position or had acquired the management skills prior to being hired into the company.
- The time that initial management training was provided to first line managers varied among the companies interviewed.
 - Only four of the ten companies provided any training before the newly promoted first line manager assumed his management responsibilities.
 - The remaining six companies had fixed training schedules. Sometimes, the new first line manager had to function in his position for up to six months before he received his initial training.
 - One of these six companies had an initial supervisory course that was provided to all potential managers in all organizational elements. This provided a general introduction. Additional training was provided within the first three months, after the first line manager had been promoted.
- All companies prefer that management training occur prior to a person assuming a management position.

C. DURATION OF INITIAL MANAGEMENT TRAINING

- Exhibit VII-1 provides a tabulation of the time spent in initial management training.
 - The number of training days ranged from 4-45 days. The average number of training days was 8.6 days.

EXHIBIT VII-1

AMOUNT OF INITIAL MANAGEMENT TRAINING
 PROVIDED FIRST LINE MANAGERS
 BY COMPANIES INTERVIEWED

COMPANY	NUMBER OF MANAGEMENT TRAINING DAYS	CLASS SIZE (NUMBER OF STUDENTS)	TRAINING SOURCE	
			IN-HOUSE (PERCENT)	OUTSIDE VENDOR (PERCENT)
1	4.0	6	-	100%
2	4.5	10-25	-	100
3	5.0	12	100%	-
4	5.0	16-20	-	100
5	6.5	10-15	8	92
6	8.0	6	100	-
7	21.5	10-25	100	-
8	29.5	10-15	100	-
9	45.0	20	67	33

- The one company which provided the 45 days of management training spread it over a year, but an initial management course was conducted over a two week period.
- Class sizes for all of the management courses ranged from 6-25 students per class.
- Of the companies who provided management training, the training source varied considerably from firm to firm.
 - Three of the companies relied totally on an outside vendor to provide instruction. However, in one company the vendor actually provided the training materials, and in-house instructors actually conducted the course.
 - Four of the companies used in-house management training courses exclusively. One of these companies employed a unique technique:
 - Professional training personnel within the company trained existing field service managers. The trained managers then assumed the responsibility for training the new first line managers. It was believed that this level of involvement by the field service managers contributed to the establishment of good communications within the management structure and permitted them a first hand assessment of the skills of the new managers.
 - This company had experienced no turnover of first line managers in the last twelve months.
- The remaining two companies relied on a combination of in-house courses and outside vendors for providing the initial management training.

- Outside vendors were used primarily for human skills development, while the in-house courses dealt more with the procedural aspects of management.

D. EVALUATION OF INITIAL MANAGEMENT TRAINING

- In order to determine the level of satisfaction that field service executives had with their current initial management training program for first line managers, they were asked to rate its quality in terms of the following criteria:
 - Course Content.
 - Method of Instruction.
 - Instructor Quality.
 - Time Required.
 - Cost.
- The results of this evaluation are presented in Exhibit VII-2. The composite average rating for all the criteria was approximately 4 out of a possible 5, indicating a high level of satisfaction.
- However, 8 out of 10 field service executives and training directors were planning modifications to their initial management training programs which included new courses and expansion into ongoing training.
- Some typical comments from these executives were:

EXHIBIT VII-2

RATING OF INITIAL MANAGEMENT TRAINING
FOR FIRST LINE MANAGERS
BY COMPANIES INTERVIEWED

CRITERIA	RATING		
	AVERAGE	RANGE	
		FROM	TO
COURSE CONTENT	3.7	2	5
METHOD OF INSTRUCTION	4.1	2	5
INSTRUCTOR QUALITY	3.8	3	5
TIME REQUIRED	4.0	3	5
COST	4.4	4	5

1 = LOW, 5 = HIGH

- "Planning to start a more comprehensive curriculum in 1980. Currently in evaluation, but will include communication skills, leadership, recruiting, personnel evaluation."
- "Presently, first line managers take courses in general management skills - they need courses specifically developed for field personnel. This will start in 1980."
- "Will have refresher course in basic management skills. Also specific courses to prepare them for the second level of management."
- "Need ongoing course to teach new management skills, and to keep first line managers sharp."
- "Very heavy emphasis will be placed on taking outside courses on their own time from universities."
- One of the companies that is currently not providing any type of management training is in the process of developing a program that will be introduced during the first half of 1980.

E. FUTURE IMPORTANCE OF MANAGEMENT TRAINING

- With the increased emphasis that is being placed on field service organizations by general management over the next five years, field service executives were asked to comment on the importance of management training during that time period.
- All of the ten companies that are currently providing initial management training indicated that this area would increase in importance over the next five years.

- The primary reasons for this increased importance was a result of the following factors:
 - Increased productivity.
 - Reduce turnover.
 - Less skilled personnel and greater demand.
 - Competitive pressures.

- The following representative comments highlight this problem area:
 - "Customer service will become a key factor in company revenues. Good first line managers will be absolutely essential."
 - "With expansion of the industry, the quality of field engineers will decline. To manage them and hold down the attrition rate, the first line manager must be very effective."
 - "Management will become more complex as the quality of field engineers declines with the rising demand. Quality of first line managers will decline, so more training will be essential."
 - "Will have to train people with fewer skills to provide adequate service."
 - "There will be an increased need for management skills over technical areas and management training must provide this."
 - "Managers will have to be able to handle more systems, more people and more demanding clients."

F. COURSE CONTENT OF INITIAL MANAGEMENT TRAINING PROGRAM

- Nine of the ten training directors interviewed provided detailed information about the course content of the initial management training program for first line managers.
- A detailed breakdown of these individual training programs is provided in Exhibit VII-3.
- Although all of the initial training programs did not provide training in all three areas of an effective management training program, they did receive varying degrees of emphasis as a function of course content and duration.
- The three areas of course content of an initial management training program can be divided into the following skill areas:
 - Conceptual skills.
 - Procedural skills.
 - People/communications skills.
 - Conceptual Skills. This element of initial management training focuses on an introduction to the theory of management and deals with the basic skills associated with the roles of planning, directing, controlling, and monitoring the performance of an organizational element.
 - This phase of the initial management training is given to familiarize the new first line manager with these basic concepts and is usually handled through a series of lecture presentations. It is intended to serve as the foundation for other phases of the training that follow.

EXHIBIT VII-3

INITIAL MANAGEMENT TRAINING COURSES OFFERED
BY COMPANIES INTERVIEWED

COURSE TITLE	LENGTH	NUMBER OF STUDENTS	FREQUENCY OFFERED	TYPE OF COURSE	VENDOR	COST PER STUDENT
INTERPERSONAL MANAGEMENT SKILLS	4 DAYS	6	2 PER YEAR	LECTURE, VIDEO, GROUP DISCUSSION, ROLE PLAY	XEROX	\$1,000
MANAGEMENT SEMINAR	5 DAYS	12	2 PER YEAR	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
SUPERVISORY MANAGEMENT	4.5 DAYS	20-25	2 PER YEAR	LECTURE, CASE STUDY, ROLE PLAYING	U. OF TEXAS	\$200
MODERN MANAGEMENT	5 DAYS	16-20	4 PER YEAR	GROUP DISCUSSION, CASE STUDY	ICS	\$200
TECHNIQUES OF SUPERVISION PRINCIPLES OF MANAGEMENT	4 DAYS	6	8 PER YEAR	CASE STUDY, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
	4 DAYS	6	8 PER YEAR	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*

*N.D. = NO DATA

EXHIBIT VII-3

(CONT'D)

INITIAL MANAGEMENT TRAINING COURSES OFFERED
BY COMPANIES INTERVIEWED

COURSE TITLE	LENGTH	NUMBER OF STUDENTS	FREQUENCY OFFERED	TYPE OF COURSE	VENDOR	COST PER STUDENT
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ESSENTIALS OF MANAGEMENT	3 DAYS	10-15	MONTHLY	LECTURE, VIDEO, CASE STUDY	AMA	\$400
MANAGEMENT BY MOTIVATION	3 DAYS	10	MONTHLY	LECTURE, GROUP DISCUSSION	AMA	(N.D.)*
LEADERSHIP SKILLS SEMINAR	1/2 DAY	10	4 PER YEAR	GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*

CORE MANAGEMENT DEVELOPMENT	15 DAYS	20	6 PER YEAR	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
WEBER-SIDWELL MANAGEMENT	10 DAYS	20	6 PER YEAR	LECTURE, GROUP DISCUSSION, CASE STUDY	WEBER-SIDWELL	\$3,000
PROCESS OF MANAGEMENT	15 DAYS	20	-	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*

*N.D. = NO DATA

EXHIBIT VII-3
(CONT'D)

INITIAL MANAGEMENT TRAINING COURSES OFFERED
BY COMPANIES INTERVIEWED

COURSE TITLE	LENGTH	NUMBER OF STUDENTS	FREQUENCY OFFERED	TYPE OF COURSE	VENDOR	COST PER STUDENT
COMPANY MANAGER	4 DAYS	25	(N.D.)*	LECTURE, SELF-PACED	(IN-HOUSE)	\$800
AFFIRMATIVE ACTION MANAGEMENT	2.5 DAYS	20	(N.D.)*	LECTURE, SELF-PACED	(IN-HOUSE)	\$500
FINANCIAL MANAGEMENT	5 DAYS	25	(N.D.)*	LECTURE, SELF-PACED	(IN-HOUSE)	\$960
MGT. PLANNING, ORGANIZATION AND CONTROL	4.5 DAYS	25	(N.D.)*	LECTURE, SELF-PACED	(IN-HOUSE)	\$880
PROBLEM ANALYSIS AND DECISION MAKING	2.5 DAYS	25	(N.D.)*	LECTURE, SELF-PACED	(IN-HOUSE)	\$500
LEADERSHIP SKILLS	3 DAYS	25	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	\$750

*N.D. = NO DATA

EXHIBIT VII-3

(CONT'D)

INITIAL MANAGEMENT TRAINING COURSES OFFERED BY COMPANIES INTERVIEWED

COURSE TITLE	LENGTH	NUMBER OF STUDENTS	FREQUENCY OFFERED	TYPE OF COURSE	VENDOR	COST PER STUDENT
SUPERVISOR ORIENTATION	16 DAYS	INDIVIDUAL	(N.D.)*	SELF-PACED	(IN-HOUSE)	(N.D.)*
MANAGEMENT	3 DAYS	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
PERFORMANCE EVALUATION	1 DAY	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
SALARY ADMINISTRATION	1.5 DAYS	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
SELECTION AND INTERVIEWING	1.5 DAYS	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
AFFIRMATIVE ACTION	1.5 DAYS	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
COMMUNICATION WORKSHOP	1 DAY	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
MOTIVATION AND BEHAVIOR	1 DAY	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
PERSONAL GROWTH	2 DAYS	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*
LEADERSHIP	1 DAY	10-15	(N.D.)*	LECTURE, GROUP DISCUSSION	(IN-HOUSE)	(N.D.)*

*N.D. = NO DATA

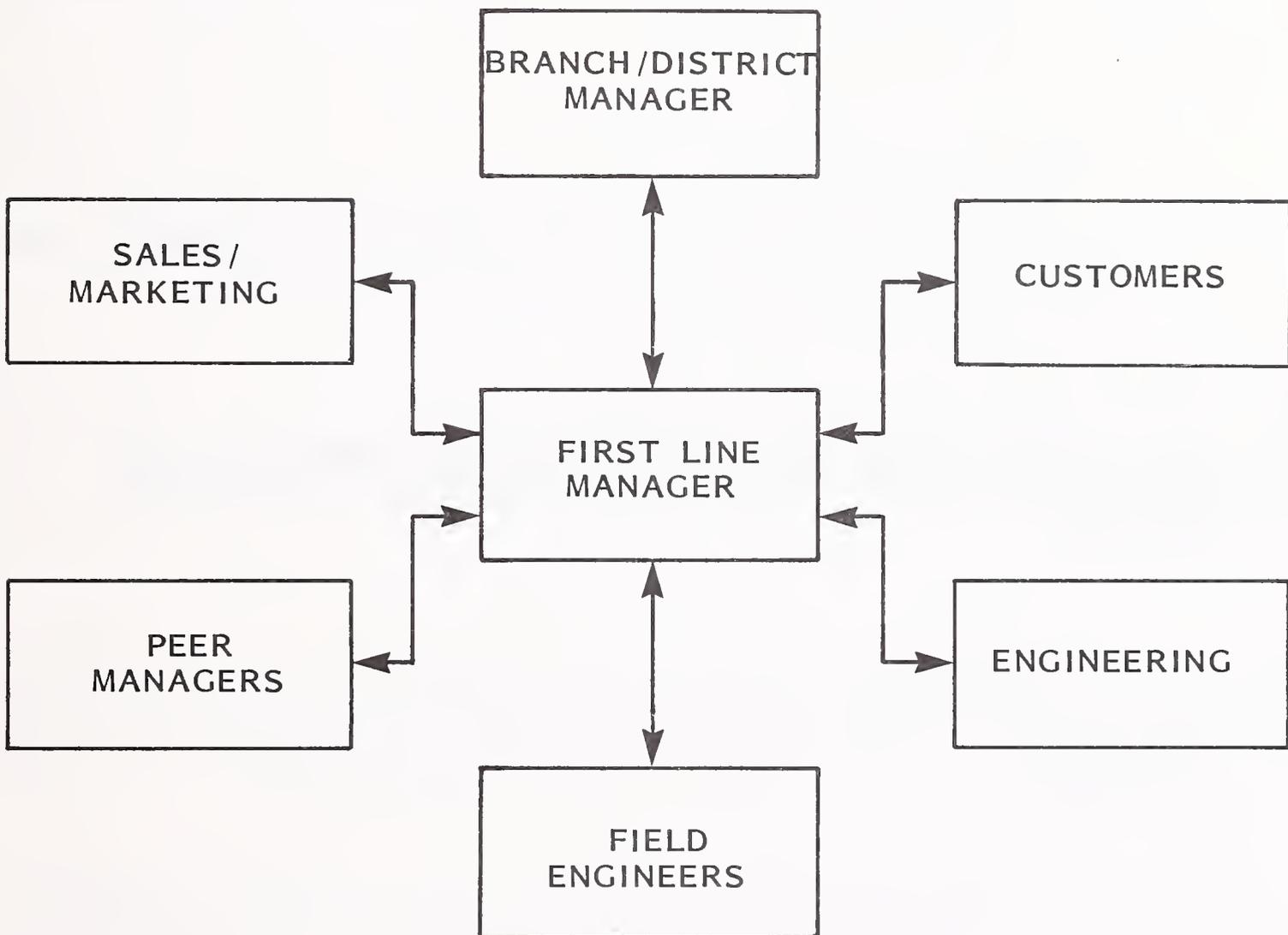
- Procedural Skills. This phase of the training deals with the development of those skills required to work within the existing organization and were intended to provide the trainee with a detailed knowledge of the following areas:
 - . Company Organization.
 - . Reporting Procedures.
 - . Personnel and Salary Administration.
 - . Planning and Budgeting.
 - . Scheduling.

- This is basically a "how to do it" course designed to acquaint the new manager with the internals of the company. During this phase of the training, the new managers usually functioned in seminar workshop environments, where they were given the opportunity to practice the application of these procedural elements in controlled situations.

- People/Communications Skills. This is the most important element of the initial training provided to new first line managers and deals with the development of the skills necessary for leading and motivating the assigned field engineers.
 - . As discussed in Chapter IV, the field service first line manager position is the most complex in terms of the number of communication interfaces that must be established and maintained. These interfaces are shown in Exhibit VII-4.
 - . In order to develop these skills, most of the management training programs offered opportunity for the first line managers to practice these skills. This was accomplished through a variety of

EXHIBIT VII-4

FIRST LINE MANAGER'S
HUMAN COMMUNICATION INTERFACES



techniques that allowed active participation by the student and included: case studies, role-playing, and problem solving seminars.

- . One company had developed a large number of case studies based on actual field experiences of first line managers. Trainees were given an opportunity to present their solutions to these case studies which were then compared to what had actually happened in the case.
- While there are a number of techniques available for the development of these skills, the important element is the active participation of the trainee in the process. Actual experience in the practicing of these skills appear to be the only effective way they can be learned.

G. SENIOR MANAGEMENT PARTICIPATION IN INITIAL MANAGEMENT TRAINING

- Of the ten companies that were currently offering initial management training, only four had the active participation of field service senior management.
 - Two of the companies had the field service executive there just to provide introductory comments at the beginning of the initial training.
 - Two of the companies had the field service executive actively involved in the review and development of the initial training program. This included periodic review of the training course and the specification of specific training elements to be included in the training program.
- One of these companies had a very active management participation below the senior executive level in the initial training program.

- Branch managers were used to do the actual training of the first line managers. It was believed that this strengthened the importance of the management training program and provided an opportunity to establish good communication with the first line managers during the beginning of their management activities.
- Although it is possible to delegate the responsibility for initial management training to an internal training or education department or an outside vendor, the active participation of the field service organization itself strengthens the initial training program considerably.

H. TRAINING BUDGET AND COST

- Very little information was obtained from the training directors interviewed about the budget allocated for management training. However, of the ten training directors interviewed, half of them were planning on increasing their budget for initial management training in 1980.
 - This was usually not the result of a reluctance to provide this information, but rather in the way that most companies budgeted for this function (on a company wide basis). It was not possible to breakout the initial training specifically for field service personnel.
- Because of its importance, INPUT believes management training should be budgeted as a separate line item within the field service group.
 - This will become increasingly important as more emphasis is placed on the profitability and productivity of field service organizations.

- Where budget increases were planned, they were substantial, with an average expected increase from 1979 to 1980 of about 50%. Although part of the increase is due to the need to train more people, a significant part is due to curriculum expansion.

I. PLANNED CHANGES TO INITIAL MANAGEMENT TRAINING

- Of the ten training directors interviewed, half of them were planning changes to their current initial management training programs.
- The primary reasons for these changes were to modify the existing curriculum or to add additional courses.
 - The modifications to the existing courses centered around improving the specificity of the course content to direct it at the field service organizations.
 - This was particularly true for those courses that were provided by outside vendors in the area of conceptual skills. It was believed that this material was, in the most part, too general for the field service environment and that it had to be more directly related to first level management problems that would be encountered.
 - These modifications were being accomplished by augmenting the course being offered by the outside vendor with additional training material developed in house by the training director's staff.
 - Additional courses that were being added were in the area of people/communications skills. These were usually workshop and role playing courses that had not been part of the initial curriculum.

- Training Directors generally indicated a need to modify their management training programs because of the reduced initial skill levels of the personnel that will require training.

J. ONGOING MANAGEMENT TRAINING

- While ten of the fifteen companies interviewed provide some level of initial management training for new first level managers, only two had an ongoing management training program.
 - This ongoing training consisted of periodic seminars and workshops that were conducted either at branch offices or accomplished in conjunction with annual headquarters meetings of the field service organization.
 - The two companies who conducted this ongoing management training believed that it was very beneficial since it provided an opportunity to reinforce the initial training that was provided, and to evaluate the progress of the new first line managers.
 - It was also valuable from the viewpoint of the first line managers since it provided them a forum in which they could discuss and receive guidance on specific management problems they were currently facing.
- The remainder of the companies interviewed relied on the next level of management to continue the training on an OJT basis. While this sounds alright, it does not appear to be very effective, because the press of daily operational responsibilities usually precludes any time being available.

APPENDIX A: QUESTIONNAIRES

TRAINING DIRECTOR

1. What are the objectives of your management training for first line managers?

2. Are you achieving these objectives? () Yes () No

If yes, how do you know _____

If no, how do you know and what are your plans to achieve _____

3. How long have you been offering management training for first line managers?

4. Please describe the courses offered in your management training program.

a) Course Title: _____

Course Content: _____

Type of Instruction (e.g. lecture, group discussion, case study, etc.)

Length of Course: _____

Number Students Per Class: _____

Cost Per Student: _____

Frequency Offered: _____

() In house developed () Outside firm _____

Name of Firm

4b) Course Title: _____
 Course Contents: _____

Type of Instruction (e.g. lecture, group discussion, case study, etc.)

Length of Course: _____

Number Students Per Class: _____

Cost Per Student: _____

Frequency Offered: _____

() In house developed () Outside Firm _____
Name of Firm

c) Course Title: _____
 Course Contents: _____

Type of Instruction (e.g. lecture, group discussion, case study, etc.)

Length of Course: _____

Number Students Per Class: _____

Cost Per Student: _____

Frequency Offered: _____

() In house developed () Outside Firm _____
Name of firm

4d) Course Title: _____

Course Content: _____

Type of Instruction (e.g. lecture, group discussion, case study, etc.)

Length of Course: _____

Number Students Per Class: _____

Cost Per Student: _____

Frequency Offered: _____

() In house developed () Outside Firm _____
Name of Firm

e) Course Title: _____

Course Content: _____

Type of Instruction (e.g. lecture, group discussion, case study, etc.)

Length of Course: _____

Number Students Per Class: _____

Cost Per Student: _____

Frequency Offered: _____

() In house developed () Outside Firm _____
Name of Firm

5. Are the courses attended only by field service personnel?

Yes No

What other company organizations attend? _____

6. Where are these management courses offered?

Corporate Headquarters Training Center Branch Office

Other _____

7. As part of the management training program do you do any testing?

Yes No Please describe _____

8. Do you provide any text books or other self-instruction material for first line managers?

Yes No Please describe _____

9. Do you provide any on-going management training for first line managers?

Yes No Please describe _____

10. What is your current annual budget for management training for first line managers?

\$ _____

11. Do you expect your budget for 1980 to change:

Increase Decrease

_____% Increase ____% Decrease

Remain at same level

Why? _____

12. Are you planning any changes in your current management training program for first line managers?

Yes No Why _____

13. Please describe these changes _____

14. Is the field service executive level involved in the development and evaluation of the management training of first line managers?

Yes No

15. What is there level of involvement? _____

FIELD SERVICE EXECUTIVE

ORGANIZATION AND SIZE

1. What is the current size of your total field service organization?

2. What is your planned increase/decrease in the size of your field service organization in 1980?

_____ %

3. Of your total field service organization, how many first line managers do you currently employ? _____

4. What is your planned increase/decrease in the number of first line managers in 1980?

_____ %

5. What are the three most important reasons for additional first line managers?

1. _____

2. _____

3. _____

QUALIFICATIONS OF FIRST LINE MANAGERS

1. For each of the following areas, what are the minimum qualifications for first line managers?

a. Academic: _____ High School _____ Two Years College or Technical School
 _____ Bachelor's Degree

1. b. Number of years experience: _____ years
 - c. Number of years with company: _____ years
 - d. Other special skills and/or training: _____
-

SELECTION OF FIRST LINE MANAGERS

1. Please rank the following sources in order of importance as sources for first line managers.

Existing Field Service Organization _____

Other Company Organization _____

Personnel/IR hires from outside _____

Personnel Agencies _____

Comments _____

2. Is there an active on-going program with your field service organization to identify potential first line managers?

() Yes () No

3. If yes, which of the following organizations are involved in this program and what is their level of involvement?

<u>Organization</u>	<u>Level of Involvement</u>
a) Field Service Management _____	_____
b) IR/Personnel _____	_____
c) Other _____	_____

4. If no, how are potential first line managers identified in your company?

5. Do you conduct any types of testing to determine the suitability of field engineering personnel for a first line management position?

Yes No

6. If yes, what types of tests are administered?

7. How long have you been using this program? _____

8. Is the identification and selection of first line managers a significant management problem in your company?

Yes No

9. If yes, what steps are you taking to improve the situation?

10. Over the next five years do you believe that identification and selection of first line managers will:

Increase in importance Decrease in importance
 Remain the same

Why? _____

RESPONSIBILITIES OF FIRST LINE MANAGERS

1. How many people is the first line manager responsible for supervising?
 Average: _____ Range: _____ to _____

2. How many people should he have reporting to him? _____

3. Does the first line manager have responsibility for any of the following areas?

	Percent of Time
<input type="text"/> Sales Support	<input type="text"/>
<input type="text"/> Equipment Maintenance	<input type="text"/>
<input type="text"/> Inventory Control	<input type="text"/>
<input type="text"/> Other Non-supervising Tasks	<input type="text"/>

4. Does the first line manager have direct maintenance responsibilities for specific accounts?

() Yes () No Why _____

5. Who do first line managers report to in your company?

6. Is this person at the same geographic location?

Yes No

7. If no, how frequently do they meet on a face to face basis.

8. Does the first line manager have responsibility and authority for hiring field engineers who report to him?

Yes No

9. What level of approval must the first line manager obtain before hiring a field engineer?

10. If the first line manager does not have responsibility and authority for hiring field engineers who report to him, how are they assigned to him?

11. Can he "veto" any of these assigned personnel?

Yes No

If yes, what level of approval must he obtain? _____

COMPENSATION OF FIRST LINE MANAGERS

1. What is the current salary range for first line managers?

_____ per month to _____ per month.

2. What was the range and average percent increase of first line managers at last salary review.

_____ % to _____ % _____ average %

3. What is the range and average percent increase field engineers receive when they are promoted to a first line management position?

_____ % to _____ % _____ average%

4. How frequently are first line manager's salaries reviewed?

_____ Semi-Annually _____ Annually

5. Does your company provide any other types of compensation other than salary for first line managers?

() Yes () No

6. What are these other forms of compensation?

7. What factors (other than inflation) will cause salaries of first line managers to increase during the next five years?

EVALUATION OF FIRST LINE MANAGERS

1. During the last 12 months what was your attrition rate for all field engineers?

_____ %

2. During the last 12 months what was your attrition rate for first line managers?

_____ %

3. Why do first line managers leave your company? _____

4. Where do they go?

() Other company organization

() Competitor

() Out of industry

() _____

() _____

5. What can or are you doing to retain them? _____

6. For each first line manager who left your organization was a formal exit interview conducted?

() Yes () NO

7. Who conducts these interviews?

_____ Next level of field service management

_____ Field service executive

_____ Industrial relations/personnel

8. How is the information collected at these interviews used?

9. Are performance goals and objectives established for first line managers?

() Yes () No

10. Please describe a typical set of performance goals for a first line manager?

11. If a first line manager is not meeting his performance goals, what steps are taken to correct the situation.

12. Who has the responsibility for establishing these performance goals?

13. How frequently are these reviewed with the first line manager?

14. Who has the responsibility of reviewing these performance goals with the first line manager?

15. Do you have a formal performance evaluation for first line managers?

() Yes () No

16. How frequently is this performance evaluation conducted?

_____ Semi Annually _____ Annually

17. On a scale of 1-5 (5=high) how would you rate the effectiveness of your performance evaluation of first line managers?

18. What areas of improvement would you like to see in your current performance evaluation of first line managers?

19. What do you believe are the three most important qualifications a successful first line manager must have?

1.

2.

3.

20. What percent of your first line managers move on to the next level of management?

 %

MANAGEMENT TRAINING

1. Do you have a formal management training program for first line managers?

() Yes () No

2. If no, how are personnel trained for first line management positions?

3. If yes, may I have the name and telephone number of the individual within your company responsible for this management training program.

Name _____

Telephone Number _____

4. How long have you provided formal management training?

_____ Years

5. When do field engineers participate in this management training?

6. Is it always before they assume first level management responsibility?

() Yes () No

7. Please rate your management training program in terms of the following factors. (1=low, 5=high)

<u>Factor</u>	<u>Rating</u>
Course content	_____
Method of instruction	_____
Instructor quality	_____
Time required	_____
Cost	_____

8. What types of on-going management training is provided for first line managers?

<u>Type</u>	<u>Frequency</u>	<u>Duration</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. What types of improvements/changes are you planning in your current management training program?

10. Over the next five years do you believe management training for first line managers will:

_____ increase in importance _____ decrease in importance
_____ remain the same

Why? _____

APPENDIX B: INTERVIEWS

APPENDIX B

TYPES OF COMPANIES INTERVIEWED AND 1978 REVENUES

COM- PANY	TYPE OF PRODUCT				1978 REVENUES				
	MAIN- FRAME	SMALL BUSI- NESS	MINI COMP- UTER	OTHER*	<\$100M	\$100- 500M	\$500M- 1B	\$1B- 2B	>\$2B
1	X					X			
2	X	X	X	X					X
3	X	X	X	X					X
4	X	X	X	X					X
5		X	X	X		X			
6				X		X			
7		X	X	X	X				
8		X	X	X				X	
9				X		X			
10				X	X				
11				X		X			
12				X	X				
13				X	X				
14				X	X				
15				X		X			

* PERIPHERALS, THIRD PARTY MAINTENANCE

