

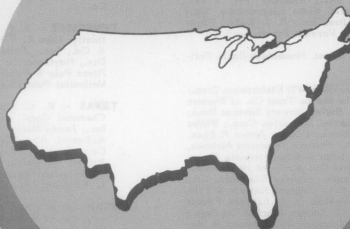
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62

Professions  
✓  
SOLVING THE SHORTAGE  
OF SPECIALIZED PERSONNEL

(**Personnel  
Policies**

**Forum**  
Survey no. 62)



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1961

# What Is The Personnel Policies Forum?

The Editors of The Bureau of National Affairs have invited representative personnel and industrial relations executives to become members of the 1961-62 Panel of the PERSONNEL POLICIES FORUM. These Panel members are top personnel officials in all types of companies, large and small, in all branches of industry and all sections of the country.

At regular intervals throughout the year BNA editors ask the members of the Panel to outline their policies and procedures on some important aspect of employment, industrial relations, and personnel problems. From these replies, the editors complete a survey report on the problem, showing prevailing practices, new wrinkles and ideas, and cross-section opinion from these top-ranking executives.

In many cases, the comments, suggestions, and discussions are reproduced in the words of the Panel members themselves. In effect, survey users are sitting around a table with these executives and getting their advice and experience on the major problems in this field facing all companies this year.

Results of each PERSONNEL POLICIES FORUM survey made during 1961-62 are printed in a special survey report which is sent, as part of the service, to users of these BNA labor reports:

Labor Relations Reporter; Labor Policy and Practice; Daily Labor Report; White Collar Report; Retail Labor Report; and Services Labor Report.

## The 1961-62 Panel

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**OHIO** — R. E. Boerner, Textile Leather Div., General Tire & Rubber Co.; Charles E. Brown, The Cleveland Pneumatic Tool Co.; Frank L. Conklin, Dura Div., Dura Corp.; Mathew I. Cotabish, Clevite Corp.; E. J. Henry, Nationwide Insurance Co.; John K. Griffin, American Welding Institute; J. H. Harkins, Sailer-berling Rubber Co.; Carroll M. Hensler, Ormet Corp.; Donald W. Hike, Globe Industries, Inc.; John John, Grisco-Russell Co.; F. A. Khaddar, Tapco Group, Thompson Ramo Wooldridge, Inc.; T. W. Mahoney, The Perfection Steel Body Co.; Ralph D. McMillen, Prelimed Line Products Co.; H. C. Martin, The Farm Bureau Cooperative Assn., Inc.; Frank E. Oehl, Industrial Rayon Corp.; William M. Proctor, Buldug Electric Products; Carl Reese, Dairyhawk Butler, Inc.; E. W. Shipley, National Carbon Co.; E. H. Wellingshoff, Cambridge Tile Mfg. Co.

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**WISCONSIN** — Donald J. Beck, Square D Co.; Paul A. Dodge, Neenah Foundry Co.; William R. Young, Belle City Malleable Iron Co.

# SOLVING THE SHORTAGE OF SPECIALIZED PERSONNEL

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## INTRODUCTION

This second survey in the 1961-62 series is based on data received from 148 executives taking part in the Personnel Policies Forum. The study is concerned with the various activities companies engage in to solve shortages of specialized personnel--that is, scientific, professional, and technical personnel.

Direct recruiting methods of some form are used by all Panel members to solve specialized personnel shortages. The favorite recruiting method is advertising (88 percent of firms), followed by technical or professional societies (62 percent), and on-campus recruiting (60 percent). Field recruiting is used by 49 percent of companies. Among other recruiting methods mentioned by Panel companies are employment agencies (37 percent), employee referral (16 percent), and executive placement agencies (9 percent).

What is the most productive recruiting method regardless of cost? Some 36 percent of reporting companies say advertising, 20 percent answer on-campus recruiting, and 18 percent say employment agencies.

Considering cost and other factors, however, which recruiting method is the best source? About 39 percent of reporting companies vote for advertising; 18 percent, on-campus recruiting; and 15 percent, field recruiting.

The most productive recruiting method regardless of cost is also the best source when cost and other factors are considered, according to three out of four reporting firms. Of this group, about a third put advertising in that category; close to a fourth, on-campus recruiting; and around a sixth, field recruiting. More smaller firms (those with 1,000 or fewer employees) than larger ones (those with more than a 1,000 employees) find advertising their best all-around recruiting technique; in contrast, on-campus recruiting is rarely used by smaller companies.

Indirect recruiting methods are used by 70 percent of Panel companies. These involve the activities--other than direct on-campus recruiting--that companies engage in to establish or maintain relations with colleges and students; for example, providing summer jobs, scholarships, research grants, and the like. Among the companies that direct their efforts at the students themselves, more than half offer them summer jobs--either under a regular summer training program or informally.

Internal procedures for solving specialized-personnel shortages--for example, promotion, retraining, and transfer within the company--are used by 94 percent of companies surveyed. Promotion is the most common (81 percent of these firms), then transfer (78 percent), and the use of technical assistants for routine tasks (46 percent). About half of these reporting firms find promotion the most effective; better than three tenths, transfer; and a fifth, retraining.

Training programs are carried out by nearly three fourths of Panel companies; however, even among those companies that report no programs, there is concern in this area. Among companies with training programs, over two fifths of the larger and three fourths of smaller ones conduct them on an informal basis; another two fifths of larger and a fifth of smaller ones report both formal and informal programs. On-the-job training is included in these programs at virtually all larger and better than four fifths of smaller firms in this group; another two thirds of these firms, both larger and smaller, include periodic discussions, conferences, and the like; classroom instruction is part of the program at three fifths and

three tenths of these larger and smaller firms, respectively. The programs may last anywhere from a week to an indefinite period; most often, though, the duration depends on the individual, the need, or the specialty.

Educational aid of some type is provided by 83 percent of companies; better than nine in 10 of these firms pay tuition fees; another two fifths of larger and three fifths of smaller ones cover the cost of books and other school supplies. This type of aid is limited to job-related courses in nine tenths of the cases. Helping employees complete college education is a practice of better than half these companies; six in seven of larger and all smaller ones offer tuition refunds for this purpose--covering the whole cost is most common. Here again, though, courses taken under this program must be job-related or at least allied to the person's career development with the company.

Other developmental programs carried out by Panel companies include, among others, the following: (1) encouraging specialized personnel to obtain professional licenses (49 percent of companies); (2) encouraging membership in professional societies (85 percent); (3) encouraging attendance at conventions, seminars, and the like (92 percent); (4) paying for subscriptions to professional or technical periodicals (virtually all companies).

Problems relating to specialized personnel take many forms, Panel members report. As to the job elements of prime importance to such employees, they cite salary, recognition, and promotional opportunities with about equal frequency. The tally is salary (75 percent of companies), recognition (74 percent), promotion opportunities (73 percent). Regarding the treatment of specialized people, the majority of Panel companies handle them the same as other white-collar employees; about 35 percent have different procedures. Maintaining pay differentials between these new and experienced personnel is most often done under the regular salary administration program; generally, though, the keynote in this area is flexibility--pay differentials depend on the individual. Among the special problems of managing these personnel, providing them with recognition and motivating them are mentioned most often.

Termination interviews with specialized personnel are conducted by 80 percent of companies; the benefit most often mentioned is the discovery of management deficiencies. Anticipating future manpower needs for these people is a practice among 67 percent of companies. One special complaint of specialized personnel is that top salaries are paid only to management or administrative officials; about half of larger reporting firms and a tenth of smaller ones say this is a problem in their company. The most common method of solving this problem is the use of parallel lines of advancement with comparable salary scales--one for those in the management or administrative line and another for those who prefer to stay in their specialty.

## RECRUITMENT

### Direct Methods

All Panel members say they use one or more of the following direct recruiting methods: on-campus recruiting, field recruiting, advertising, technical or professional societies, employment agencies (public, private, or specialized), employee referral, and executive recruiters. The favorite recruiting method is advertising (88 percent of firms), followed by technical or professional societies (62 percent), and on-campus recruiting (60 percent). The table that follows summarizes the percentage of firms using the specified recruiting methods.

Direct Recruiting Methods

	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Advertising	88%	89%	86%
Technical or professional societies	62	68	51
On-campus recruiting	60	69	43
Field recruiting	49	55	37
Other	58	63	49

The breakdown of the "other" category looks like this: employment agencies (37 percent of all companies--42 percent of larger--29 percent of smaller), employee referral (16 percent--20 percent--9 percent), executive recruiters (9 percent--11 percent--5 percent), consultants (6 percent--8 percent--3 percent).

In addition, some other techniques mentioned are unions, employer associations, letters of application, and the "grapevine."

Among these direct recruiting methods, advertising is the most productive regardless of cost. So say 36 percent of reporting companies (more smaller ones--41 percent--than larger--33 percent). On-campus recruiting and employment agencies take second and third places as most productive, setting cost aside, being named by 20 percent and 18 percent of responding companies, respectively. Among other techniques mentioned are field recruiting (15 percent of reporting firms) and employee referral (6 percent). A few companies, included in the following table under "other," report such techniques as executive searchers, technical or professional societies, employer associations, and the "grape vine."

Most Productive Regardless of Cost

	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Advertising	36%	33%	41%
On-campus recruiting	20	28	3
Employment agencies	18	16	22
Field recruiting	15	13	19
Employee referral	5	5	6
Other	6	5	9
	<u>100%</u>	<u>100%</u>	<u>100%</u>

Considering cost and other factors, which recruiting method is the best? Here again, advertising is the top choice, being named by 39 percent of reporting companies. Next come on-campus recruiting (18 percent) and field recruiting (15 percent). Some 14 percent of reporting firms say employment agencies are the best source, considering cost and other factors; another 6 percent say employee referral. Other methods mentioned include unions, technical or professional societies, solicitations by prospective employees, and trade contacts. The table that follows summarizes the answers of reporting firms on this question.

Best Source Considering Cost

	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Advertising	39%	33%	50%
On-campus recruiting	18	27	--
Field recruiting	15	13	19
Employment agencies	14	13	16
Employee referral	6	6	6
Other	8	8	9
	<u>100%</u>	<u>100%</u>	<u>100%</u>

Is the most productive recruiting method regardless of cost also the best source when cost and other factors are taken into account? Three out of four reporting firms believe so. Of this group, 32 percent say advertising is tops, whether cost is considered alone or in company with other factors; 23 percent say on-campus recruiting, and 16 percent report field recruiting. The table that follows shows the percentage of responding firms that say the same method is most productive, no matter what the cost, and also the best source, considering cost and other factors.

Most Productive--Best Value

	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Advertising	32%	26%	44%
On-campus recruiting	23	35	--
Field recruiting	16	13	20
Employment agencies	15	15	16
Employee referral	7	7	8
Other	7	4	12
	<u>100%</u>	<u>100%</u>	<u>100%</u>

The "other" category includes such sources as technical or professional societies, solicitations by prospective employees, or the "grapevine." It is interesting to note in the three preceding tables that

more smaller firms than larger ones find advertising their best all-around recruiting technique; in contrast, on-campus recruiting is rarely used by smaller companies.

### Indirect Recruiting Methods

Indirect recruiting refers to those activities--other than direct on-campus recruiting--that companies engage in to establish or maintain relations with students and colleges--for example, providing summer employment, scholarships, research grants, speakers for seminars, and the like. In some form, this is a practice of 70 percent of Panel companies (77 percent of larger and 52 percent of smaller ones). Better than half the companies (65 percent of larger and 40 percent of smaller ones) direct such efforts at the college or university itself; just under half (57 percent of larger and 34 percent of smaller ones) aim at the students.

Among the latter group, more than half offer summer jobs to students, either as part of a regular summer training program or on an informal basis. Close to three in 10 supply students with some form of literature, such as company brochures, house organs, or copies of the College Placement Annual. Plant tours are conducted for students by about two in 10 of the larger firms in this group (none of the smaller ones). Among other techniques, each used by about one in 10 of these larger companies, are co-operative work-study programs, advertising in school publications, and scholarships. One or two firms each try such things as talking with student groups, surveying applicants who refuse employment offers, or interviewing students during their junior year. A larger phonograph-record company has "two high school observation programs each year when students spend one week going through all departments."

One Panel member, representing a larger electronics firm, sums up his company's student-practices this way:

Summer hire program consists of employing juniors, seniors, and advanced students for the summer from \* \* \* colleges and universities where we regularly recruit. We have a Cooperative Program with Purdue, University of Michigan and University of California at Berkeley. The students work six months and attend school six months. In addition, we have a work-study Fellowship Program with UCLA. --Richard F. Carroll, Chief, Industrial Relations, Nortronics, Division of Northrop Corp., Hawthorne, Calif.

Of the companies that aim their indirect recruiting at the college or university, better than two in five maintain contacts with placement directors apart from the recruiting period. Around three in 10 of the larger firms in this group (plus one smaller one) cultivate professors--for example, by providing them summer jobs, inviting them to visit the plant, or using them as consultants. Scholarship programs are maintained by a seventh of these firms, both larger and smaller. Another seventh each of the larger companies make financial contributions, provide materials, or offer speakers. A few of these larger companies provide grants-in-aid for research projects, cooperate in special programs, or say they "advertise." Other efforts mentioned by these companies include such things as participation in industry education programs, visits by alumni, serving on advisory boards, committees, or seminars, or part-time teaching by company personnel. One smaller aircraft firm describes its college relations thusly:

We maintain a very good relationship with the Engineering School at the University of Oklahoma. As a result of this we usually get the cream of the Aero School graduates. We have found that if we can forecast our needs accurately enough, it is better to get the students just out of school and then train them to suit our operation. --Brown H. Sanderson, Personnel Manager, Aero Commander, Inc., Bethany, Okla.

### Internal Procedures

Internal procedures for solving specialized-personnel shortages--promotion, retraining, transfer, and the like--are used by 94 percent of Panel companies (95 percent of larger and 91 percent of smaller ones). Promotion is the most common, checked by 81 percent of Panel members in this group. Next come transfer (78 percent) and the use of technical assistants for routine tasks (46 percent). Retraining is a practice of 40 percent of reporting firms, almost twice as many smaller (59 percent) as larger ones (31 percent). Three percent of these companies mention other internal methods, such as aptitude testing and guidance counselling, and promoting education through tuition subsidy.

## Internal Procedures

	All Cos.	Larger Cos.	Smaller Cos.
Promotion	81%	89%	66%
Transfer	78	82	69
Use of technical ass'ts for routine tasks	46	53	31
Retraining	40	31	59
Other	3	3	3

Which of these methods have Panel members found most effective? Just under half of those responding say promotion, and slightly better than three in 10 report transfer. Retraining is the most effective method according to 19 percent of reporting firms (nearly four times as many smaller as larger ones), and the use of technical assistants for routine tasks is the choice of 18 percent of these companies (almost twice as many smaller as larger ones). One smaller firm that finds another technique most effective says:

Aptitude testing plus guidance counselling plus special training has provided us with top grade candidates for "hard-to-fill" positions. These people were actually in our own employ but their special aptitudes were not known to us or to themselves.--Richard J. Noonan, Vice President, Operations, Hospital Service Corp. of W.N.Y., Buffalo, N.Y.

The following table summarizes the responses of those companies that reported which method they found most effective. Figures total more than 100 percent, since some companies favor a combination of techniques, such as transfer and promotion or retraining and promotion.

## Most Effective In-Company Procedure

	All Cos.	Larger Cos.	Smaller Cos.
Promotion	49%	57%	36%
Transfer	32	35	25
Retraining	19	10	36
Use of technical ass'ts for routine tasks	18	14	25
Other	1	--	4

In the comments that follow, Panel members explain how they use the various internal procedures.

In addition to solving the specific problem of availability of specialized talent, there are by-products that enhance transfer policy, i.e., improved communications, opportunity for others in the recipient group to increase their fund of technical knowledge, and growth and recognition of the transferee.--Walter J. Wright, Personnel Rep., Applied Physics Laboratory, The Johns Hopkins University, Silver Spring, Md.

\* \* \*

Have increased the number of technicians in our laboratories who have taken over much of the routine or detail work of chemists or chemical engineers. Also have increased our drafting room staff, adding highly qualified draftsmen as design draftsmen who do much of the legwork and drawings required normally by engineers--Smaller central chemical company.

\* \* \*

A combination of transfer within our organization and a retraining program. In our specialized field of plasma physics, we are constantly aware of the diversified abilities of our personnel and utilize them to the fullest extent.--Pete DePaolo, Personnel Mgr., Plasmadyne Corp., Santa Ana, Calif.

\* \* \*

Goal set for lesser trained person to earn right to more knowledge and pay assuming he has potential. Example impresses others who may have assumed they were on top of their opportunities but not capabilities.--Smaller western research company.

Responsibility for Recruiting Activities

Recruitment is the immediate responsibility of the personnel-industrial relations executive in about a fifth of larger reporting companies and just over four fifths of smaller ones. In contrast, the same task is assigned to someone under the P-IR exec by a little better than seven tenths of larger responding firms

and about a tenth of smaller ones--for example, a P-IR supervisor or someone on the personnel staff. Other persons in charge of recruitment, mentioned by slightly less than a tenth of responding firms, include such personnel as corporate or managerial officials, a training director, and a chief engineer.

Final responsibility for recruitment lies with the P-IR executive among slightly less than seven tenths of larger reporting firms and just under a tenth of smaller ones. About a fifth of larger and a third of smaller companies that delegate such responsibility give it to some management official, such as the general manager, division manager, or plant manager. Vice presidents have the last word at slightly less than a tenth of larger reporting companies and a little better than two fifths of smaller ones; in many cases they share their authority with some management official. At better than a third of smaller reporting firms, the president has the final say. Some others with final authority include a board chairman, department head, and a human relations director.

Who handles on-campus or field recruiting among Panel companies? Over two fifths of responding companies, both larger and smaller, say the top man in the personnel department; better than a third of these larger and about a tenth of smaller ones say someone on the personnel staff. In many of the latter cases, Panel members note that the personnel man is accompanied by other persons--engineers are mentioned most often. Among others charged with on-campus or field recruiting are technical recruiting specialists (about a tenth of larger responding firms), vice presidents (a tenth of smaller ones), management officials (a fifth of smaller ones), professional recruiters (just under a tenth of larger ones).

### TRAINING

Nearly three fourths of Panel companies say they conduct some form of training program for specialized personnel; the figures for larger and smaller companies are 79 percent and 66 percent, respectively. However, the absence of a training program doesn't necessarily mean a lack of concern in this area; witness the comments of two companies that have no program:

The high degree of technical knowledge required by our engineers makes in-plant technical training impractical, beyond an adaptation of knowledge to our particular needs. We use a wide range of specialized fields of knowledge which further complicates training planning. We use the Human Engineering Institute for non-technical training, direct subsidies for technical training.--John John, Mgr., Mfg. Admin. & Ind. Relations, Griscorn-Russell Co., Massillon, Ohio.

\* \* \*

Generally speaking we are very weak in this area. At present we have pretty well run out of promotable material and need to start a replenishing program which would entail considerable training. Proposals have been submitted to management along this line.--Larger mfg. company.

### Formal v. Informal Programs

Among those companies with training programs, a sixth of the larger and one smaller firm say their program is conducted entirely on a formal basis; over two fifths of the larger companies and three fourths of the smaller have wholly informal programs. Both formal and informal training programs are conducted by nearly two fifths of the larger and a fifth of the smaller companies in this group. Typical formal programs are described in the following comments:

Formal training is based on stage of responsibility. For each division this breaks down as follows: (a) basic management series--example, self-development, company policies, divisional orientation, etc.; (b) advanced management series--example, conference leadership, how to supervise other prof., etc.; (c) general management series--example, speech, corporate finance, corporate law, etc., (both internal and external). Everyone in the company who is exempt participates in some formal training each year.--H.R. Sampson, Director of Industrial Relations, National Starch & Chemical Corp., New York, N. Y.

\* \* \*

The Applied Physics Laboratory currently conducts a training program in Guided Missile Technology for its new, relatively inexperienced, professional staff members. Most of the Laboratory's current effort is in the missile and satellite fields, although it maintains significant concern with space technology and pure research. Since the essentials of these major areas of interest are rarely taught in colleges and universities, participation in this training program is mandatory for all new employees with bachelor's or master's degrees and less than three years'



experience after receipt of the bachelor's degree. The objective of the program is to acquaint the new employee with all the various aspects of guided missile technology, and thus to facilitate his transition from the academic viewpoint to that of the practicing research and development investigator.--Walter J. Wright, Personnel Rep., Applied Physics Laboratory, The Johns Hopkins University, Silver Spring, Md.

Informal training programs are detailed in the following sample comments:

Very informal program. Orientation for engineers is done in a period of 16 to 22 weeks, mainly consisting of exposure to all departments of the Company, followed by a written report of the new employee's observations of the operations of these departments. Other types of specialized employee may have only six weeks' orientation. Following orientation period, new employee is assigned to specific duties under a division manager or a department head, who will use on-the-job training, possibly supplementing with outside courses available to him in local schools and directly pertinent to his job.--James J. Flanagan, Ass't. Treasurer, Worcester Gas Light Co., Worcester, Mass.

\* \* \*

Our training program for specialized personnel is highly informal in the sense that courses, seminars, etc., are offered as the opportunity arises. There is no planned program specifically for specialized personnel as such.--Robert E. Bidwell, Mgr., Employee Relations, Laboratory for Electronics, Inc., Boston, Mass.

#### Content of Programs

What do company training programs consist of? Virtually all larger and over eight in 10 smaller firms with programs have on-the-job training; about two thirds each of smaller and larger ones include periodic discussions, conferences, etc. Classroom instruction is part of the program at three fifths and three tenths of these larger and smaller firms, respectively. Among other things mentioned by these companies are attendance at outside schools (a fifth of larger), job rotation (a tenth of larger), plant tours (about a tenth of larger), and educational subsidy (around a tenth of smaller). One company that strongly emphasizes the role of its supervisors says:

We believe that the most important training and development of the individual comes through the relationship with his supervisor. Accordingly, our objective is to make every supervisor a "training director." To this end we are developing a development guide for each individual professional, for use by him and his supervisor.--H. R. Sampson, Director of Industrial Relations, National Starch & Chemical Corp., New York, N. Y.

Where do companies conduct their training programs? Of those reporting, slightly less than half the larger and almost three fifths of smaller ones say only inside the plant. Just over half these larger firms and about two fifths of smaller ones conduct their programs both in and outside the plant.

The favorite place for holding training sessions in the plant is the work area; so report three fifths of the larger and about two thirds of the smaller firms that use in-plant facilities. Next come conference rooms (three tenths each of larger and smaller companies) and classrooms (about three tenths of larger and a tenth of smaller). Special in-plant training facilities are mentioned by a seventh of larger companies in this group. Other facilities include such places as the library, study rooms, or plant cafeteria.

Of those companies that use outside facilities for training purposes, half the larger and two fifths of the smaller ones mention colleges or universities. Vocational or technical schools are used by close to three in 10 of these larger firms, and adult education by almost a fifth of them. Some other outside facilities mentioned are technical societies, the American Management Association, and professional or technical seminars and conferences.

The duration of training programs among Panel companies varies anywhere from a week to an unlimited period. Most often, though, companies vary the length of their programs according to the individual, the need, or the specialty; this is the practice in three in 10 companies with programs, both larger and smaller. Just over a fifth of these larger firms and about a tenth of smaller ones say their programs last more than a year (four years is maximum); close to a fifth of larger and a seventh of smaller ones say six months to a year; and a tenth of larger and a fourth of smaller firms report six months or less. Training is conducted on a continuing basis in an eighth of larger companies in this group, and for an indefinite

period in close to a fifth of smaller ones. Some companies vary the program's length according to the type of personnel, as in the following comment:

Length and composition of trainee program varies from 2 weeks for administrative trainee to 24 months for manufacturing trainee. Manufacturing trainee actually assigned to such departments as Research & Development and Quality Control for periods up to 6 months.--J.A. Jones, Jr., Industrial Relations Manager, Celanese Corp. of America, Narrows, Va.

Do Panel companies conduct their programs on company time or the employee's time? Just over half the larger firms with programs but about three fourths of smaller ones say on company time; slightly less than half the larger and just over a fifth of smaller ones conduct them both on company time and the employee's time. Only 4 percent of these smaller firms run their programs only on the employee's time (none of the larger do so).

### Responsibility for Training

Among those companies with training programs, close to three out of five put a staff official in charge of the program (63 percent of larger and 43 percent of smaller ones). This staff official is a training specialist in over half of these larger companies; in the rest of them, he is a personnel man. A line officer has immediate responsibility for training in just over a third of companies with programs (31 percent of larger and 43 percent of smaller ones). In about a tenth of reporting firms, primary concern for training specialized personnel is shared by both staff and line officials. One larger electrical company assigns the training program to its technical employees.

The person in charge of training reports to a line officer in over half the companies with programs (38 percent of larger and 91 percent of smaller ones). In a little better than two fifths of these firms, he reports to some staff official (60 percent of larger and 9 percent of smaller firms). Reports on the training program are shared by line and staff officers at 2 percent of these larger companies.

Actual instruction for specialized personnel is provided by someone in line management, ranging from the immediate supervisor to plant or department heads, in over two fifths of companies with programs (42 percent of larger and 45 percent of smaller ones). Line personnel instruct their colleagues in over a fourth of these companies (26 percent of larger and 30 percent of smaller ones). In about a tenth of reporting firms (8 percent of larger and 15 percent of smaller) the training or personnel director performs the teaching task; in many cases he is assisted by outside consultants, lecturers, or specialists from within the company. About 7 percent of companies in this group use college or university professors to instruct their specialized personnel. Some 6 percent of these larger firms say they use the "available expert" for instruction purposes, and another 6 percent make instruction a joint line-staff responsibility. One executive from a company in the latter group says:

Laboratory technical staff are the selected line and staff personnel who have both technical specialty and teaching qualifications.--Walter J. Wright, Personnel Rep., Applied Physics Laboratory, Johns Hopkins University, Silver Spring, Md.

Another company sums up responsibility for its training program this way:

Training and development are functions of both Division and Corporate Staffs. The Division has the prime responsibility to develop their employees and the Divisional Personnel Development Coordinator normally reports to the Division Manager of Industrial Relations. The Corporate Staff advises and coordinates the divisions' development programs and this function reports to the Corporate Manager of Employee Relations. The Division Development Staffs do the majority of their own development and training instruction and counselling.--E. L. Ogden, Director, Employee Relations, The Babcock & Wilcox Co., N. Y., N. Y.

### EDUCATION

Educational aid for specialized personnel is provided by 83 percent of Panel companies (85 percent of larger and 80 percent of smaller). Better than nine in 10 of these firms, both larger and smaller, pay tuition fees. Close to half the larger and over half the smaller ones in this group pay 100 percent of the cost of tuition; another three tenths of the larger and about two fifths of the smaller ones pay half the cost. About a fifth of these larger firms pay between 50 and 90 percent of the total. One company explains its practice in this area thusly:

The Company provides outside education with full payment of costs when the information is not presently within the Company. Candidates are selected only when this situation exists and there is no tuition refund for any other type of training. --C.H. Hansen, Manager, Industrial Relations, Lehn & Fink Prod. Corp., N. Y.

Paying for books and other school supplies is a practice of slightly more than two fifths of larger and three fifths of smaller companies in this group. Over seven in 10 of the larger and close to three in five of the smaller ones pay 100 percent of the cost; another fourth of larger and over two fifths of smaller firms that pay for books cover half the cost. The following excerpt from one company's policy and procedure manual on employee education describes its educational assistance program.

Any full time employee who has completed six months' satisfactory service with the Company may be eligible for the following educational assistance benefits up to a maximum of \$300 yearly, less necessary payroll deductions for the amounts involved: (1) Reimbursement for 100% of the cost of tuition. In the case of correspondence courses, tuition is construed to include all costs described in the course brochure that are required for entrance in and satisfactory completion of the course. (2) Reimbursement for 50% of the cost of any registration and/or laboratory fees required by the school or course. (3) The cost of textbooks required by the school or course, up to but not in excess of \$25 per course. --American Potash & Chemical Corp., Los Angeles, Calif.

Educational aid is limited to job-related courses in the great majority of Panel companies that provide such aid; only a tenth of reporting firms don't follow that practice. One larger chemical company in the latter group says educational aid "must only make the employee more valuable vocationally." Similarly, another firm says:

We feel education aid can be helpful to jobs ahead for promotion and also broadening the individual's outlook to broader horizons. --R.B. Gibson, Personnel Director, Fred Meyer, Inc., Portland, Oreg.

The following excerpt exemplifies the position of those companies that limit educational aid:

The course requested must be to the mutual advantage of the Company and the employee. To satisfy this requirement the course must relate directly to the employee's present work or be part of a planned and approved development program. --American Potash & Chemical Corp., Los Angeles, Calif.

### In-Plant Courses

What percentage of Panel companies offer college level courses in the plant? Only about a tenth of firms providing educational aid do so. The following comments describe courses offered by some companies in the latter group:

Faster reading for Management Development (East Tennessee State College), Oral Communications (University of Virginia), Servomechanisms (University of Virginia) are examples of college level courses offered periodically. These classes would be conducted by college personnel and handled through the in-service education department. --P.W. Hickie, Industrial Relations Manager, Raytheon Co., Aero-Weapons Div., Bristol, Tenn.

Graduate and undergraduate courses in Mathematics, Electronic Engineering, and Physics. --Walter J. Wright, Personnel Rep., Applied Physics Laboratory, The Johns Hopkins University, Silver Spring, Md.

University of Southern California offers two three-unit graduate courses per year at our facility. 100% of cost per student is borne by the company. --Richard F. Carroll, Chief, Industrial Relations, Nortronics, A Division of Northrop Corp., Hawthorne, Calif.

### Completing College Education

To round out the picture on educational aid, Panel members were asked if their companies helped employees complete college education. A "yes" answer was given by over half the companies providing educational aid (64 percent of larger and 39 percent of smaller ones). Six in seven of these larger firms

and all smaller ones state that they provide tuition refunds for employees seeking college degrees. The refunds range from 50 to 100 percent of total tuition costs (100 percent is most common). In almost all cases, the courses that an employee takes under these programs must be job-related or at least allied to his career development.

In addition to refunding tuition costs, some companies help out in other ways; for example, by granting leaves of absence or time off, paying for books and fees, arranging part-time schedules or cooperative work assignments. A few companies restrict college aid to employees with a certain length of service, usually two years.

#### OTHER DEVELOPMENTAL PROGRAMS

In addition to training programs and educational aid, all Panel companies surveyed engage in some other kinds of career-development activities for specialized personnel. For example, just under half the companies (49 percent of both larger and smaller ones) say they encourage specialized personnel to obtain professional licenses. In almost three tenths of these cases, the encouragement is informal--a talk by the first-line supervisor. Another fourth of companies in this group provide some type of financial assistance; that is, they pay the license fees or, as in the case of one larger research laboratory, "reimburse for tuition cost for refresher course in preparation for examinations." Time off to prepare for the license examination or to take the exam is given by slightly less than a fourth of the companies. About an eighth each of these larger companies use on-the-job training to foster professional licensing or encourage their people to take courses at outside institutions; another tenth offer in-plant courses. Recognition is mentioned as a stimulus to getting a professional license by slightly less than a tenth of the companies; about the same number of larger firms mention professional and technical societies.

In the same vein, Panel members were asked if their companies encourage membership in professional or technical societies. About 85 percent (80 percent of larger and 95 percent of smaller companies) answered "yes." The favorite method for encouraging such membership is company payment of dues and/or membership fees; this is the practice of around two thirds of these companies, both larger and smaller. In some cases, companies reserve this treatment for managers, senior personnel, or selected individuals. A few companies also pay other costs, such as travel and dinner expenses; this too is restricted, however. About a fourth of larger and three tenths of smaller companies in this group promote memberships by such personal methods as counselling, the example of senior employees, or the suggestion of supervisors. About an eighth of larger companies and a few smaller ones grant time off to attend, study, or prepare for society meetings. Other company efforts mentioned in this area include such things as publicizing society news, recognizing participation in society events, or arranging meetings to be held on company premises.

What percentage of Panel companies encourage their specialized personnel to attend conventions, seminars, and the like? Ninety-two percent (88 percent of larger and 100 percent of smaller ones) do so. Here again, the most popular method for encouraging such attendance is company payment of expenses incurred; this is true of four fifths of these companies, both larger and smaller. Underwriting expenses is not a *carte blanche* affair, however. Many companies attach certain conditions--for example, only those who participate in the program get the free ride, only a chosen few may go, the number of attendances is limited, the department head must recommend and approve the attendance, or the person must share part of the expenses. About an eighth of companies in this group confine their efforts to personal encouragement, that is, the supervisor suggests, the person is counseled to attend, or the one in charge of the program drums up interest. Some other methods companies use in this matter are to encourage certain persons to prepare and deliver papers, to hold seminars on company premises, or to publicize the events in memorandums, bulletins, or house organs. One larger space company includes these gatherings on business or special trips.

Another way companies aid in the development of specialized personnel is by paying for subscriptions to professional or technical publications. Virtually all Panel companies follow this practice, 96 percent of larger and 97 percent of smaller ones. In some cases, Panel members note that these subscriptions are not personal ones but intended for the plant library and general circulation.

The table that follows summarizes the percentage of companies that engage in these specific practices.

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 Developmental Programs
 

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	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Encourage professional licensing	49%	49%	49%
Encourage membership in professional or technical societies	85	80	95
Encourage attendance at conventions, seminars, etc.	92	88	100
Pay for subscriptions to professional or technical publications	96	96	97

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Other practices mentioned by a scattering of companies include maintaining a plant library, giving awards for writing technical papers, providing a creative atmosphere for personal development of ideas, sending personnel to special industry or management development programs (there is some overlapping here with training programs), and other practices already covered above, for example, conducting in-plant seminars, lectures, etc. One smaller rubber company offers personal counselling by an industrial psychology firm.

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 SPECIALIZED-PERSONNEL PROBLEMS
 

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What elements do Panel members believe are most important for meeting the needs of specialized personnel? Three are mentioned with about equal frequency--salary (75 percent of companies), recognition (74 percent), and opportunities for promotion (73 percent). In giving prime consideration to the latter two incentives, however, many Panel members say they assume that salary also is in line. Fringe benefits and job security are rated as most important by 31 and 25 percent of companies, respectively. Obviously, specialized personnel want their money now and in-hand, and will shop around to get it. The table that follows summarizes the frequency with which these elements were checked by Panel members.

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 Most Important to Specialized Personnel
 

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	<u>All Cos.</u>	<u>Larger Cos.</u>	<u>Smaller Cos.</u>
Salary	75%	74%	77%
Recognition	74	76	72
Opportunities for promotion	73	79	63
Fringe benefits	31	29	34
Job security	25	25	26

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In addition to the above, Panel members specified other items they considered of prime importance; among them are providing a challenging job assignment, allowing these people to participate in decisions that affect them, giving them freedom to function within their specialty, and creating a proper working climate. A larger electronics company reports: "High-level technical personnel already in high income brackets are looking more at stock option and other forms of professional tax compensation."

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 Specialized-Personnel Practices
 

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Do personnel practices for specialized personnel differ from those for other white-collar employees? The majority of Panel companies treat both groups the same; only 35 percent of companies report some form of different treatment of specialized people (40 percent of larger and 26 percent of smaller ones). One company on the majority side explains its thinking this way:

Too much distinction between treatment of specialized vs. nonspecialized personnel tends to create a class consciousness that is not conducive to the degree of teamwork between engineering-sales-manufacturing that is required in our company. We discourage obvious favoritism. An experienced and imaginative shop man is often harder to replace than a young engineer.--John John, Manager Manufacturing Admin. & Industrial Relations, Griscom-Russell Co., Massillon, Ohio.

Among those companies that treat specialized people differently, about three in 10 say they allow such personnel more freedom, usually in such things as time off, reporting time, or following company regulations. Similarly, most of the other different practices for specialized personnel can be grouped under the term "more," that is, these people get more of what is given to white-collar employees. For

example, more personal attention, more encouragement and direction, more recognition, more opportunities, responsibility, and the like. Some other practices not included in that category include special salary programs, better fringe and other benefits, and training programs.

### Maintaining Pay Differentials

How do Panel companies maintain pay differentials between new and experienced specialized personnel? Among larger reporting companies, the tendency is to rely upon the regular salary administration program (53 percent of larger versus 26 percent of smaller ones); among smaller reporting companies the preference is for some type of salary review with merit increases or necessary adjustments (53 percent of smaller versus 25 percent of larger ones). Another 8 percent of larger responding firms mention the use of maturity curve techniques. Other methods for maintaining differentials include the use of industry pay curves, hiring new people below the median rate, withholding bonuses from new personnel for two years, job evaluation, and salary surveys. Generally, the keynote in this area is flexibility, even among those companies with regular salary programs. One larger oil company, for example, says: "productivity and creativity are paramount in salary administration." Another smaller firm explains:

Although all such employees are merit rated annually, there is no guarantee that the most senior employee will be the highest paid. We attempt to compensate individuals on their ability.-- Joseph N. DeMartino, Personnel Manager, Rockbestos Wire & Cable Co., Division of Cerro Corp., New Haven, Conn.

### Managing Specialized Personnel

Panel members were asked this question: What do you believe are the special problems of managing specialized personnel? About two out of five reporting companies, both larger and smaller, say one special problem is that of providing them with some form of recognition, that is, recognizing their professional status, special abilities, accomplishments, and the like. Though most responding companies just state the problem others report some solutions to it--for example, supplying monetary rewards or titles, allowing these people to participate in management decisions, consulting with them, and similar types of special treatment. Another problem reported by two fifths of larger and about a fourth of smaller responding companies is that of motivating specialized personnel, that is, giving them challenging job assignments and opportunities to grow in their specialty. Among other problems mentioned by reporting companies are selecting and developing supervisors, creating a climate of freedom for research or creative thinking, maintaining satisfactory communications up and down the line, orienting them to company goals and policies, and promoting group effort without submerging the individual. One larger research laboratory says: "maintaining a system of indirect supervision and guidance." Another chemical firm reports no special problems other than the high cost of mismanaging specialized personnel.

### Termination Interviews

What percentage of Panel companies conduct termination interviews with specialized personnel? About 80 percent of both larger and smaller ones say they do. Around nine tenths of companies in this group report that they find such interviews beneficial. Among the few who don't, one larger chemical company says it's a waste of time, another smaller manufacturer says it's seldom beneficial because departing employees are not candid, and a larger metal refiner is on the fence--"yes, we find out why leaving; no, we don't do anything about it."

In what ways do Panel companies find these interviews beneficial? Close to three in 10 of these reporting companies find that interviewing people who are leaving the company helps to reveal management deficiencies; just over one in four finds that it uncovers trouble spots; and close to one in five says it helps to test the effectiveness of personnel policies and practices. About an eighth of companies in this group report that termination interviews give them an insight to turnover problems, and around a seventh say they conduct the interviews just for information purposes. Among other benefits reported, one larger electrical firm says, "keep you on your toes as to what's going on;" and another larger electronics company reports, "specialists will often 'tell off' a personnel interviewer." The table that follows summarizes the benefits reported by those companies that find termination interviews beneficial.

## Benefits From Termination Interviews\*

	All Cos.	Larger Cos.	Smaller Cos.
Reveal management deficiencies	28%	30%	24%
Uncover trouble spots	26	25	27
Test effectiveness of personnel policies and practices	18	15	24
Information only	15	13	19
Insight to turnover problem	13	15	10
Other	5	8	--

\* Figures total more than 100 percent because some firms report more than one benefit.

Future Manpower Needs

Anticipating future manpower requirements for specialized personnel is a practice among 67 percent of Panel companies (77 percent of larger and 49 percent of smaller ones). Close to two thirds of these companies engage in some form of advance manpower planning (two thirds of larger and three fifths of smaller ones). For example, one larger tool manufacturer says: "our engineering department requirements are based on a five-year forecast."

Another method for anticipating specialized manpower needs, mentioned by around a sixth of these companies, is conducting personnel surveys or inventories. A larger food processing company in this group reports, "complete review of company talent every year." A larger chemical firm says, "questionnaires to departmental managers requesting a list of their requirements."

A scattering of companies mention that manpower requirements are considered in their budget review programs. For instance, this company reports:

Consideration of manpower needs is a regular part of semi-annual budget and program review and projection procedure. In the review process, consideration is given to anticipated turnover from all causes (both voluntary and involuntary).--Larger southern company.

Other methods include such techniques as comparing needs with past turnover experience and keeping a pool of junior engineers and chemists.

Once future needs for specialized personnel have been anticipated, what is the next step for Panel companies? Over half the companies in the group say they engage in recruiting to fill future manpower needs (just over half the larger and about three fifths of smaller ones). Just over a fifth of these companies engage in training or management development programs, depending on what the need is (about a fourth of larger and close to a fifth of smaller ones). A few companies mention promotion or transfer, and a couple draw on their reserve pool of specialized personnel. One larger chemical firm says, "backstopping future promotable employees and making certain employees versatile."

Specialization or Management?

A complaint sometimes heard from engineers and scientists is that top salaries are paid only to those in administrative or management positions. Panel members were asked if that was a problem in their company and, if so, what means they used to solve it. Just under half of larger reporting companies and a tenth of smaller ones say this is a problem. However, of the other companies answering "no problem" a fifth of the larger and a ninth of the smaller ones mention that they have some method for compensating specialized personnel who prefer to grow in their specialty.

What is the solution to this problem, where it exists? Among those companies reporting this problem, just over half the larger and a third of smaller ones say they use two parallel lines of advancement, one for those who move into administrative or management positions and another for those who prefer to remain in their specialty. One larger chemical company, for example, says: "have tried to solve this by also providing in technical departments an avenue of progression for those interested in technical work only." Another larger engineering firm reports: "by establishing specialist and senior titles and parallel salary ranges to that applied to supervisory and managerial ranges." Among other comments on the problem a scattering of companies mention that their policy is to compensate specialized personnel on the basis of their value to the company or merit.

PREVIOUS PERSONNEL POLICIES FORUM SURVEYS

1. Manpower Planning for the Emergency, March 1951
- \* 2. Status of First-Line Supervisors (Compensation, Authority, and Benefits for Foremen), April 1951
3. Is Management Listening? May 1951
4. Plant Labor-Management Committees, June 1951
5. Recruiting College Graduates, July 1951
6. Employees' Financial Problems, August 1951
7. Christmas and Year-End Personnel Problems, October 1951
- \* 8. Foreman Training, January 1952
- \* 9. The Personnel Executive (His Title, Functions, Staff, Salary, and Status), February 1952
- \* 10. White-Collar Office Workers (Their Working Conditions, Benefits, and Status), April 1952
11. Executive Development, May 1952
12. Building Employee Morale, July 1952
13. Choosing Better Foremen, August 1952
- \* 14. Supervisory Merit-Rating, September 1952
15. Communications to Employees, November 1952
16. Fringe Benefits for Supervisors, January 1953
17. The Personnel-Industrial Relations Function, March 1953
- \* 18. Community Relations, August 1953
- \* 19. Personnel Testing, September 1953
20. The Older Worker, October 1953
21. Administration of Pension Plans, November 1953
22. Earnings of First-Line Supervisors, January 1954
23. Evaluating a Personnel-Industrial Relations Program, February 1954
24. Employment Stabilization, April 1954
25. Administration of Health and Welfare Plans, July 1954
26. Control of Absenteeism, September 1954
27. Computing Absenteeism Rates, October 1954
28. Wage-Salary Administration, November 1954
29. Company Safety Programs, February 1955
30. Unemployment Compensation Problems, May 1955
31. Supervisory Development: Part 1, July 1955
32. Supervisory Development: Part 2, September 1955
33. Automation, November 1955
34. Nonsupervisory Office Employees, December 1955
35. Downward Communications, February 1956
36. Military Leave Policies, May 1956
37. The Executive, July 1956
38. Medical Services for Employees, August 1956
39. Professional Employees, October 1956
40. Job Evaluation, December 1956
41. Merit Rating of Rank-and-File Employees, February 1957
42. Disciplinary Practices and Policies, July 1957
43. Employee Job Satisfaction, September 1957
- \* 44. Company Aid to Education, November 1957
45. Executive Compensation, December 1957
46. Company Experiences with Automation, January 1958
47. Status of First-Line Supervisors, July 1958
48. Supervisory Selection Procedures, September 1958
49. Grievance Procedures for Unorganized Employees, October 1958
50. Raising Employee Productivity, December 1958
51. Tools of the Personnel Profession, February 1959
52. The Personnel-Industrial Relations Function, April 1959
53. Employee Handbooks, July 1959
54. Controlling Health & Welfare Costs, October 1959
55. Fringe Benefits, January 1960
56. Wage Policies in an Inflationary Period, March 1960
57. Controlling Absenteeism, June 1960
58. Finding & Training Potential Executives, September 1960
59. Retirement Policies, December 1960
60. Orientation of New Employees, April 1961
61. Industrial Health Programs, July 1961
62. Solving the Shortage of Specialized Personnel, September 1961

\* Out of print

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