

knowledge and skills increase, so increase his opportunities and challenges, his value to the research and development programs, and, consequently, his salary.

Our involvement in the report literature includes the responsibility for the reporting system itself and for the report distribution system. We also have the liaison responsibility for the research and development program and project write-ups. These assignments are primarily staff functions for the Director of Research and for the Director of the Research Center. We have been given these assignments because they fit in with our over-all responsibilities. In addition, they allow us to learn the evolving research and development objectives, and, consequently, contribute to our ability to meet the evolving information needs of Hercules scientists.

TECHNICAL EDITING

Technical editing is another staff function which was transferred to us in the early 1950's from the Research Director's staff. Hercules research management encourages the publication of technical papers. The technical editor implements this encouragement by assisting the authors in the requirements of the scientific and technical journals for submitted papers. In addition to editing the papers for grammar, style, format, clarity, and for suitability of figures, tables, and illustrations, the technical editor is the liaison for the author with Hercules reviewers. The technical editor, thus, concentrates his knowledge and experience to the needs of the author and saves the author considerable time which he would otherwise have to devote in what is for some a rather frustrating and discouraging activity. Furthermore, it is economical to concentrate knowledge and experience in one person to serve for many,

particularly for those who do not publish frequently, just as it is in technical translating, information system design, and other functions.

CONCLUSIONS

Underlying most functions and activities of the Technical Information Division is the philosophy of freeing the Hercules scientists as much as possible for accomplishing their technical objectives. If we increase their productive reading of the technical literature, we increase their research productivity. If we provide them with answers to their questions of the technical literature when and to the degree they want, we increase their research productivity. When we are successful in these objectives, we are managing information operations and services successfully.

LITERATURE CITED

- (1) Skolnik, H., "Designing a Technical Information Center," in "Technical Information Center Administration," A. W. Elias, Ed., pp. 1-17, Spartan Books, Washington, D. C., 1964.
- (2) Skolnik, H., "Designing a Technical Information Center—In Retrospect," *J. CHEM. DOC.* 8, 70-72 (1968).
- (3) Skolnik, H., and R. E. Curtiss, "A Mechanized Information System for Many Outputs from One Input," *J. CHEM. DOC.* 8, 41-45 (1968).
- (4) Clouser, B. E., and H. Skolnik, "Information and Communication Practice in Industry," T. E. R. Singer, Ed., Ch. 11, Reinhold, New York, 1958.
- (5) Skolnik, H., "Designing an Index," *Percolator* 35, 26-31 (1959).
- (6) Skolnik, H., and A. Clow, "A Notation System for Indexing Pesticides," *J. CHEM. DOC.* 4, 221-227 (1964).
- (7) Hercules Technical Reports, Hercules Incorporated, 1964.

Administrative Considerations at BioSciences Information Service*

Personnel Management

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This paper discusses three general areas of personnel administration at BIOSIS: employment, benefit programs, and general personnel administration.

EMPLOYMENT

Procedures concerning employment are particularly important because the consequences are so far reaching. At the same time, it is difficult to measure the adequacy of the program. It may take months or years before inadequate departmental performance shows up, or there is poor morale or other tangible evidence of success or failure.

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We presently use all of the conventional channels for attracting and recruiting employees: newspaper ads, referrals, employment agencies. None of these resources is either outstandingly good or bad, but rather depends upon the available labor market, the level of the staff being recruited, the time of year, and maybe even the position of the stars. Regardless, there is no substitute for careful, discriminating selection, and we try to make it clear to our staff that hiring someone short of their ideal for a given position is often poor economy and usually bad management. It is often helpful for the manager concerned to reduce to writing the general requirements of the person

needed, such as temperament, work history, and the minimum standards, and then to hold out until these needs are satisfied as realistically as possible. Preliminarily, it is often useful to have the counsel of a colleague or one's superior for this stage, particularly if the position to be filled is important. Subjectivity is often stripped away under these circumstances, and one's "gut" feeling is at least subject to further discussion or review.

We use several fundamental tests to help us in our judgment. The short form of the Wonderlic Test gives a rough estimate of one's ability to learn new material. For clerical positions, we also administer the General Clerical Test of The Psychological Corp.—at least in some of its parts. These two are aptitude tests and measure some degree of potentiality, no matter what the job function may be. Staff being considered for a scientific position take a scientific aptitude test compiled by us, which measures substantive biological knowledge.

We have found that the greater one's formal education, the more likely the scores will be biased on the high side. Psychological tests are not expected, even by their designers, to be the where-with-all, but only one more tool for evaluation. Indeed, some of the very best and most dependable staff have scored on the lower side of the scale, and some of the best scorers perform very inadequately.

Administration of the test is paramount, and it is absolutely essential that all taking the test do so under as identical conditions as possible. It is also very helpful to have a year or two of experience with each type being administered, so that some prediction may be made as to its validity within the organizational population. Psychological tests may not only measure and eliminate those that might perform marginally, but also eliminate those who are overly qualified for a given position. This aspect is often overlooked, but it would be unfair and unrealistic to expect one with a superior intellect to perform successfully over an extended period in a type of job that did not make demands upon such resources.

Another useful and essential selection tool concerns reference checking. For this to provide valid results, there should be uniformity in application, not only by the same manager, but also among managers. What is to be gained if one manager is very exacting and another lax? Use of a check list such as provided by the Wonderlic Telephone Reference Guide is useful, and provides a better set of questions to be asked than most are able to compile—particularly with an uncooperative respondent. Essentially the same information may be derived from a mailed reference check list which allows the respondent to complete the appropriate boxes. There may be a slight advantage in using an oral inquiry, since questionable areas may be elaborated upon.

For better or worse, the interview is the prime and usually deciding screening function. Techniques vary widely amongst even highly skilled interviewers. There is certainly a high degree of subjectivity to be exercised, and the conduct and extent of the interview will, of course, differ as to the type of job being filled. Although there are certain questions that are more useful to ask than others, there is no substitute for experience in interviewing. As a general guide in this connection, we use the Wonderlic Interviewers' Guide. This check list may go into more

detail than normally necessary, and many of the questions may be eliminated, as shown by experience. But it is a useful general guide and provides a written record of responses.

Effective selection techniques combine all of these tools in whatever proportions seem most effective from experience. We normally conduct a very short superficial primary interview which, combined with the test scores, determines whether or not an applicant should be sent along for further interviewing by the first line supervisor. While the primary interview initially screens candidates, it never goes further than this function. We insist that the person for whom the applicant is to work must make the final employment decision.

Its counterpart, the exit interview, is often overlooked as a valuable source of information concerning the labor market generally, as well as one's success as a supervisor and morale builder. As there are terminations, we ask our managers to conduct such an interview for their staff as they leave, and note certain basic information concerning the reason for termination. This may bring to light salary structures that are out of line or other underlying problems not otherwise perceptible.

BENEFIT PROGRAMS

Over the past decade, as benefit programs became more generally established, a broad-scope program has evolved at BIOSIS. A sliding scale vacation policy has been in effect for some time and takes into account the privilege of longer vacations not only for higher echelon personnel, but also for staff of longer tenure, regardless of rank. Up to one month is allowed for senior staff. A similar sliding scale for sick leave permits up to 10 days a year. The purpose, of course, is to retain superior staff, rather than to reward seniority in and for itself. Experience has shown that, with few exceptions, the prime goal has been attained. A fairly liberal schedule of paid holidays has been in force for a number of years, and on the average provides about ten paid holidays a year, dependent on the day of the week on which the holiday falls.

Individual coverage for Blue Cross and Blue Shield is a popular benefit we recently adopted. Indeed, if all aspects of a benefit program were measured for popularity, vacations would be number one and Blue Cross-Blue Shield coverage a close second. In addition, Group Life Insurance to the extent of one's annual salary is provided for all. There is an additional accidental death and total disability provision for salary continuance up to 60%. A jointly contributed retirement program permits investments in common stock in balance with fixed-income investments, and has proven to be very well received because of its hedge against inflation.

Of course, the very best of benefit programs would not be effective if it were not successfully communicated to the staff. There remains, therefore, a continuing job of persuasion of the advantage of any program with periodic reminders.

GENERAL PERSONNEL ADMINISTRATION

There are a number of other important aspects of personnel administration that cannot be lumped conveniently under any other topic except "General." A modest service

award program which recognizes continued service is conducted on an annual basis. This is commonly given at our Christmas Luncheon, and while it is questionable that such recognition in itself would serve as a reason to continue one's employment, it certainly serves to remind the rest of the staff that others have served long under happy conditions.

Training programs are useful from both the organizational and employee standpoint. Certainly, the more skilled the employee, the greater his value. There is a tuition reimbursement program for job-related subjects, and many have attended graduate and undergraduate courses and American Management Association Seminars. Actual job training, of course, is a daily occurrence, with the training responsibility resting with the department manager. As well, in-house seminars have been conducted by subject specialists within the building for subjects ranging from computer science to rapid reading. It takes an enlightened and farsighted management to implant such programs, but there is no question that long-term benefits to all are present.

Wage and salary administration is important. It is necessary to keep jobs of similar difficulty in line within the organization, as well as competitive with the labor market generally. This area is subject to constant change and, often within several months after the last review, there may be substantial misalignments—particularly in such short skills as those concerned with data processing. There are useful salary studies published, both locally and nationally, and these generally provide a much better basis than often misleading ads in classified sections of the newspaper.

Safety is much less of a problem in offices than in industrial sites, but it is still a consideration and requires periodic reminders. Typewriters are sometimes moved by typists, electrical wiring becomes frayed, and first aid is administered by those without the background to do so effectively.

Firm and clear-cut organizational rules and regulations concerning personnel matters must be spelled out for all to know and understand. They often come out sounding overly legalistic, which is hardly an advantage, but they should be at least subject to a wide number of imaginative interpretations and stand the substantial test of time. There should be a clear definition of the holidays to be taken, sick leave, and vacation policies. Rules concerning what to do when you are late, when you are sick, and when you want to increase the number of dependents for income tax withholding should all be clearly set forth and kept up to date.

A continuing job description for each job function is necessary, if for nothing more than to review for the supervisor the activities of his staff. An essential step is to discuss such a description with the person being described, for it is not unusual to have a substantial

difference between what an employee thinks he should be doing and how his supervisor views the position. Job descriptions should be written by the person managing the function being described and reviewed by the superior. The necessity for keeping up-to-date descriptions should not be overlooked, despite the difficulty in having them written in the first place.

New employees should be oriented upon employment. They should see the physical plant and get a basic understanding of the work flow of the organization, their particular contribution towards the work flow, and some idea of what other people do and where. This is an important morale booster, and starts a new member of the staff off on the right foot.

A suggestion system, if properly administered, can be a useful boost to make people feel that they are part of an organization. It can even produce useful ideas. It is certainly true that no one knows a job like the person who is doing it, and often an interesting and imaginative insight into a problem can be gained in this manner. But it does require much more than just hanging a box, and the concept must be constantly rejuvenated and stimulated.

One of the least appreciated and most important aspects of personnel administration is the organization and maintenance of accurate, well-conceived personnel files for both present and past staff. These are necessary for the conduct of ongoing salary administration, credit references, and reference checks.

Employee evaluation programs are useful, if for nothing more than to have a supervisor and his employee take a close look at each other at least twice a year and to have a personal discussion as to how one is succeeding, both in his own eyes and in his supervisor's. It is also often the only chance that a reticent employee may have for personal discussion. If constant personal contact were assured, such formalized programs might not be necessary, but practices differ widely among people, and there is much more to be said for such a program than against it.

Finally, the care and preservation of employee communication is one of the most essential functions of any personnel program. The staff must be told about goals and aspirations of an organization; where it is, what it hopes to do, and how it plans to do it with the help of all concerned. There may be newsletters, postings on the bulletin board, enclosures with the payroll, large assemblies, or probably best, a combination of all of these.

Administrative considerations concerned with personnel continue to be one of the most pressing problems of an information center. As our staff goes, so goes the organization. People are our most important resource, and we can go nowhere without them. We have not solved all these needs, nor do we expect to, but we do recognize them, and recognition may be at least one-half of it.