The Revised Handbook for Analyzing Jobs

U.S. Department of Labor
Lynn Martin, Secretary

Employment and Training Administration
Roberts T. Jones
Assistant Secretary for Employment Training
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CHAPTER 18

THE NARRATIVE REPORT

The narrative report is an introduction to information about an establishment. A good narrative report provides background for the particular study and orients the reader to the jobs as they existed at that time. This information provides the reader with broad general occupational and industrial information which cannot be included in the JAR.

COMPILING DATA

The information in a narrative report is obtained from discussions with workers, establishment officials, industry experts, college or technical school personnel, and from a review of the technical literature of the industry. The information gathered during this process should relate to the structure or organization of the establishment, the interrelationships of the jobs, the workflow processes, personnel policies and practices, hazards, and other items which may contribute to job information. Much of this information can be obtained during the orientation tour (Chapter 15). The following list contains examples of questions the analyst should ask:

1. (For industrial establishments) What is the purpose of the establishment? What are the processes by which raw materials are converted to finished products? (For non-industrial establishments) What is the nature of the service rendered? What knowledge or technologies are required for adequate job performance? How is the service rendered? What are the general job duties or procedures?
2. What are the general environmental conditions of the work place? Are any hazards encountered by workers? Are any working conditions peculiar to the establishment?
3. Are the services or workflow of the establishment divided into departments or units? If so, how? How are these units interrelated? How are they arranged in the workflow process?
4. What are the personnel practices? Does a career lattice exist in this establishment? What are the entry jobs? Are training courses provided by the establishment?
5. Does this establishment have any unique characteristics in comparison to other establishments in the industry? What is the history of the development of the establishment? Has it been automated or has management initiated any progressive or unusual processes, equipment, or services? What effects have these new ideas or machinery had on the work performed and on the employment level of the establishment?

ORGANIZING MATERIALS

Generally, the data obtained through the discussions with establishment personnel or other technical experts can be placed under several major headings. Liberal use of headings and subheadings, even in a short report, will provide the reader with a reference to the particular sections of the report and will provide a text that is easier and more interesting to read. In addition, the use of headings will help the analyst organize materials and set limits on the amount of information to be included.

Since each analyst's report and presentation will include different types of data, a standard report outline cannot be established. However, a few general headings have been used in most reports. The outline below presents these headings and typical items in their contents. A report may not include all these headings or it may include additional ones as needed.

Introduction or Purpose of Establishment

- Purpose
- Scope and limit of study
- History and development of the establishment

Environmental Conditions

- Description of layout
- Description of equipment
- General environmental conditions and general working conditions

Organization and Operations or Activities

- Departmentalization of establishment
- Workflow
- Processes (industrial establishments)
- Services (non-industrial establishments)

Personnel Policies and Practices

- Hiring requirements
- Recruitment and sources of workers
- Methods of training
- Entry jobs
- Career lattices and promotional opportunities
- Job restructuring
- Effects of automation on personnel

Other Sections

- Comments
- Effects of automation on establishment or industry

Appendix and Glossary

WRITING THE REPORT

Introduction or Purpose of the Establishment

This section should begin with a statement about the product or service of the establishment. If the study is in an industrial plant, this section should include a general discussion of the raw materials and processes used and the range and variety of products produced. If a non-industrial establishment is studied, the section should include a description of the nature of the service and to whom and how the service is rendered. The establishment number which appears at the top of the first page beneath the words ''Narrative Report'' is used to identify the establishment. The primary SIC Code used on the Narrative Report should be identical to the one used on the Staffing Table form. The name of the establishment is not used in the report. Frequently, this section includes a history of the establishment, future plans of the establishment, and future trends in the industry.

Any restrictions which the employer imposes on the study and which affect the preparation of JAR's should be noted here. For example, the employer may limit or bar access to jobs involving secret processes.

Environmental Conditions

This section includes a description of the layout and size of the establishment. This gives the reader a picture of the physical arrangement of buildings, facilities, equipment, storage, or related areas as they affect workflow. The narration in this section includes information about working conditions and equipment, machines, or tools used. The description given here is concerned with the overall establishment picture and furnishes information not contained in the individual JAR's.

Organization and Activities

An explanation of the organization of the establishment gives an orientation to the individual reports. This section might begin with a discussion of the units of organization, the processes or major activities, and their relation to the workflow. This presentation could be followed by a more detailed description of the units, processes, or activities. This section should provide a visualization of the total work situation in which the worker fits.

Personnel Policies and Practices

This section contains information about the establishment's hiring requirements and methods of placement. Included are educational, physical, and other requirements; the employer's methods of recruitment; and the policy and practice in hiring. In addition, subsections may deal with methods of entry, training given or sanctioned by the establishment, the presence of union affiliation, apprenticeship programs, regulated occupations, and career lattices and promotional opportunities.

If the purpose of the study is to find job-worker situations which can be restructured or if the establishment has practiced some form of job restructuring, it should be noted here. Also, if the establishment has been automated and if the automation has had significant impact on employment, that information should be presented here. The discussion should include the effects of restructuring or automation on placement policies and practices, on employment statistics, and on any changes in educational and training requirements.

Other Sections

Sometimes a report needs to include a section or sections devoted to special or unique topics. For example, the analyst may include a section about the product market or about special factors affecting workflow in the establishment. The discussion of the history of the establishment or of future trends in the establishment or industry may appear here rather than in the introduction or purpose of the establishment section.

At times this section needs to include information about the effects of automation or mechanization in an industry or establishment. In these instances, a discussion of the effects of automation on personnel should appear in the personnel policies and practices section; all other aspects of automation or mechanization, such as changes in equipment, changes in processes or activities, or effects on working conditions and physical requirements, should be included in a section at the end of the report.

Appendix and Glossary

In the course of the study, the analyst may obtain materials such as brochures or forms, which might add to the report. These should be included in an appendix. Technical terms, processes, or equipment which need to be clarified should be included in a glossary at the end of the report.

GUIDELINES FOR REPORT WRITING

The writing of a narrative report is the process of converting the information secured into usable reference material. The report contains pertinent and essential information in the fewest possible words, and should be consistent with proper English grammar usage.

1. The analyst should distinguish between statements based on fact and those based on opinions. At times, statements of opinions enhance the value of the narrative by rendering an overall picture of the study. However, any sources of opinion should be identified as "In the analyst's opinion" or "The personnel manager states. . .". Crediting a statement thus, while indicating that the statement is not substantiated completely, gives authority for the opinion and lends weight to it.
2. A paragraph must be built around one central thought. Sentences not contributing to that specific thought do not belong in the paragraph. However, breaks between paragraphs serve as resting points for the reader and paragraphs of more than 200 or so words should not be used.
3. Suitable transition statements are necessary for the reader to follow the changing thought from paragraph to paragraph. Even when main headings and subheadings are used, the transition should be such that the reader understands that one thought has been completed and the next is beginning.
4. The emphatic position of the first sentence in a paragraph should not be wasted by the writer. Because of its position of emphasis, the opening sentence often is used to state a central thought which the remainder of the paragraph expands and supports. At other times, it points the direction in which the new paragraph will move away from the preceding paragraph.
5. The main headings may be centered. Secondary headings then can be placed at the left margin. Third-order headings (usually to be avoided) might be placed in the text. Label headings should be avoided. For example, while Plant Environmental Factors is adequate for a very broad heading, a subheading under it should say: Physical Layout of Departments rather than Layouts. The format should be consistent.

An example of a Narrative Report is included on the following pages.

NARRATIVE REPORT

Establishment No. 362-150-392

SIC: 2281

PURPOSE OF ESTABLISHMENT

This establishment is a processing plant within a synthetic yarn-producing division of a yarn and thread manufacturing corporation. It is engaged in spinning yarn from synthetic fibers for use in manufacturing such articles as hosiery, pile fabrics, and men's and women's outerwear. Basic yarn counts produced range from 6's to 30's both single and plied.

Prior to 1959, this plant was engaged in the manufacture of carded cotton knitting yarns of coarse to medium count. The transition to producing synthetic yarns was completed in early 1959 with the installation of machinery developed for manufacturing synthetic yarn. This continuous processing system is a variation of the cotton processing system eliminating the processes which involved opening, cleaning, and transforming cotton fibers into laps preparatory to the carding process. This development is due to the fact that synthetic staples do not require extensive opening and cleaning as do natural fibers. The establishment has 9,792 spinning spindles, producing in excess of 175,000 pounds of synthetic yarn weekly.

PERSONNEL POLICIES AND PRACTICES

Training for production jobs in this plant is usually on-the-job. Training periods extend from two weeks up to two years, the latter applicable to those persons engaged in setting up and repairing various machinery. No specialized training is required for entry jobs, only a general education being sufficient for communicating with coworkers and for learning the required tasks of the job. There are no definite lines of promotion; however, workers are upgraded into jobs that require more experience and skill as vacancies arise based on their industriousness and willingness to assume responsibility. This is an equal opportunity establishment. There are no restrictions on the employment, training, and promotion of minority groups, women, or the handicapped. This establishment works three shifts.

ORGANIZATION AND OPERATIONS

The Plant Superintendent coordinates production activities for the plant. Subordinate supervisory personnel include a Card Room Supervisor, Spinning Room Supervisor, Shipping and Outside Supervisor, and Machinist. A Shift Supervisor for both the second and third shifts works under the combined supervision of the Card Room Supervisor and Spinning Room Supervisor. This study was limited to the observation of production jobs.

Receiving

Synthetic fibers are shipped to the plant by manufacturers of synthetic staples in boxes weighing up to 650 pounds. Fibers are unloaded from trucks and stored in the warehouse according to type. Boxes of synthetic staples are drawn from stock and positioned near blending machines with steel bands and tops removed to facilitate feeding fibers into machine hoppers.

Carding

This process, as used in this establishment, involves blending synthetic fibers or reusable waste and feeding fibers through a distribution system into carding machines that produce sliver. Specified amounts of fibers fed into blending machines are deposited onto a conveyor from automatic weighing units attached to blending machines. Fibers are sprayed with fugitive dye tints and antistatic chemicals for identity as to type and to reduce friction in fibers during processing, and are conveyed through a piping system to automatic feeding units containing aprons with pins that feed fibers on a controlled basis to carding machines. Carding machines are equipped with several cylinders covered with metallic spikes that work in conjunction with carding drums to remove impurities from fibers, arrange fibers parallel, and produce sliver which is coiled in cans for use in the drawing process.

Drawing

This involves combining and passing several strands of sliver through two or more pairs of rollers, each of which rotate at a higher speed than the preceding pair, to attenuate the sliver.

Two phases of this process are used; namely, breaker and finish drawing. In the initial step, eight slivers are fed into drawing machines that combine and straighten the fibers to produce a strand of uniform weight and size. The second phase combines eight breaker strands of sliver into one, thus improving the quality of the sliver processed. Sliver formed during the drawing process is coiled into cans for feeding into roving frames.

Roving

The purpose of this process is to combine and reduce sliver received from drawing frames into a continuous, slightly twisted strand called roving and to wind roving into bobbins for use in the spinning process. The drafting rollers of the roving frames draw out the sliver and flyers slightly twist the roving as it is wound into bobbins.

Spinning

In this process, ring spinning frames are used to reduce roving to yarn and to wind yarn onto bobbins. Roving from bobbins placed in the creels of spinning frames is drawn to its final size by sets of drafting rollers, twisted by travelers on the rings of spinning frames, and wound onto spinning bobbins.

Winding

This involves transferring yarn from spinning bobbins onto cones and spring coils through use of winding machines. A technique for joining broken ends together in specified yarn types is employed in addition to the use of hand knotters. This process, called ''splicing'' by management, involves gluing broken yarn ends together with a latex base compound, producing a knotless yarn.

Inspecting and Packing

Yarn packages are examined for finishing defects, such as knots, soils, loose or tight winding, and absence of labels and specified color tip of cones. Ultraviolet lamps are used for detecting packages failing to meet blending specifications and for separating faultily mixed lots. Following inspection, yarn packages are wrapped in paper to prevent damage to yarn during shipment and packed in shipping cartons. Cartons are stenciled with identifying information, weighed, strapped with steel bands, and moved to the shipping area by a conveyor.

Shipping

Customer order shipments are loaded onto trucks and transported to a central warehouse for consolidation of orders and delivery to customers of subsidiary plants, following priority of orders.

ENVIRONMENTAL CONDITIONS

The physical plant was constructed during the 1920's but has been remodeled in the past seven years. It is adequately lighted and ventilated and is clean. A cafeteria containing a coin-operated food-and-beverage dispensing machine is available for use by workers during breaks and lunch periods. Smoking areas are also provided and so designated to minimize fire hazards.

The noise level is considered critical as a result of the constant operation of machines throughout the plant. Automatic vacuum piping systems and overhead traveling cleaners reduce the amount of lint and other foreign matter in the carding and spinning rooms that could result in worker discomfort.

Workers handling cartons of yarn and fibers or other heavy objects work together as team members or use lifting devices and handtrucks to prevent personal injury while moving materials and supplies.

Though the possibility for injuries exists for personnel working with or around machines, strict observance of safety rules and regulations rarely results in serious injury. Selected workers from each shift are trained in rendering first aid treatment when minor injuries occur.

SPECIAL COMMENTS

The processing of synthetic fibers into sliver using the system outlined eliminates the picking process which involves transforming fibers into laps for use in the carding process. The replacement of revolving flats with a series of rolls containing metallic spikes reduces the grinding and stripping operations, usually accompanying the carding of natural fibers, as synthetic fibers do not require extensive cleaning. As a result, such tasks as feeding blending machines and tending carding machines have been added to the carding process.

GLOSSARY

6's to 30's: coarse to medium yarn.

Hoppers: Units containing aprons with spikes that remove compression from synthetic fibers. Several types of fibers and waste can be blended into this unit with unusable waste fibers removed by piping system.

Sliver: Loose, untwisted strand of synthetic fibers produced on carding machines and drawing frames.

Fugitive Dye: A dye which is not fast.

Attenuate: To make slender or thin.

Cans: Large, cylindrical containers used to receive and hold sliver delivered from drawing frames for feeding into roving frames.

Drafting Rollers: Two or more pairs of rollers, each pair of which rotates at a higher speed than the preceding pair, serving to attenuate the roving passing between them.

Carding Machine: Machine used to remove impurities from synthetic fibers, arrange fibers parallel, and produce sliver for drawing process. The machine consists of several cylinders covered with metallic teeth that card the fibers.

Drawing Frame: Machine used to combine several strands of sliver and draw out strand to produce one of uniform weight and size.

Spinning Frame: Machine used to draw out and transform slightly twisted roving into yarn and wind yarn onto bobbins.

Roving Frame: Machine used to draw out strands of sliver and loosely twist them together to form roving.

Winding Machine: Machine used to transfer yarn from bobbins onto cones and spring coils.

Traveler: A small, free-running metal ring sliding on a bar through which thread passes into other textile machine to impart a twist to the thread.