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 1991



This digital version of *The Revised Handbook for Analyzing Jobs* is a reprint of the original text printed by the U.S. Department of Labor (1991). It includes pages that were missing in the original printing (Chapter 9) by:

U.S. Government Printing Office Superintendent of Documents. Mail Stop: SSOP. Washington, DC 20402-9328 ISBN 0-16-035877-9 STOCK NO. 029-013 00095-1

CONTENTS

Chapte		Page
	Introduction	i
1.	Job Analysis: What It Is and Its Uses	1-1
2.	Concepts and Principles of Job Analysis Determining Job Limits Dimensions of a Job: The Job Analysis Components Sentence Analysis Machines, Tools, Equipment, and Work Aids	2-1 2-1 2-2 2-3 2-3
3.	Worker Functions	3-1
.	Structure of Worker Functions Procedure for Rating Worker Functions Definitions and Examples of Worker Functions	3-1 3-2 3-2
4.	Work Fields Combination Work Fields Procedure for Assigning Work Fields Alphabetical Listing of Work Fields Work Fields Organization List of Combination Work Fields Work Fields Descriptions	4-1 4-1 4-3 4-4 4-7 4-8
5.	Materials, Products, Subject Matter, and Services Organization of MPSMS Procedure for Assigning MPSMS MPSMS Groups Classifications, Definitions, and Examples of MPSMS Alphabetical Listing of MPSMS	5-3 5-5 5-25
6.	Sentence Analysis Technique	6-1
7.	General Educational Development Divisions of GED Scale Rationale for GED Scale Definitions Scale of General Educational Development Definitions and Examples of GED Levels Procedure for Evaluating and Recording GED Requirements	7-1 7-1 7-1 7-2 7-4
8.	Specific Vocational Preparation Scale of Specific Vocational Preparation Definitions and Examples of SVP Levels Procedure for Evaluating and Recording SVP Requirements	8-2
9.	Aptitudes	9-2
10.	Temperaments	10-1
11.	Guide for Occupational Exploration Procedure for Assigning GOE Code and Title Definitions and Work Groups of GOE Interest Areas	11-1

12. Physical Demands and Environmental Conditions	12-1
Physical Demands Factors, Definitions, and Examples	12-1
Environmental Conditions Factors, Definitions, and Examples	12-1
Procedure for Preparing the Physical Demands and Environmental Conditions Section	10 14
of the JARPhysical Demand and Environmental Condition Symbols	12-14
Limits of Weights Lifted/Carried or Force Exerted	12-15
Sample Physical Demands Form	12-13
Sample Environmental Conditions Form	12-18
13. Writing Job Summaries and Descriptions of Tasks	. 13-1
Preparing Job Summaries	. 13-1
Preparing Descriptions of Tasks	. 13-3
Writing Descriptions of Tasks	. 13-4
Style Conventions for Recording Descriptions of Tasks	.13-10
Determining Detail Needed in Job and Task Descriptions	.13-12
List of Frequently Used and Misspelled Words	
14. The Job Analysis Report	14-1
Procedure for Preparing the JAR	. 14-1
Procedure for Recording Establishment Job Titles and DOT Titles	. 14-6
Sample Job Analysis Report Form	. 14-7
15. Procedure for Preparing for and Conducting a Job Analysis Study	. 15-1
Industry Study Planning Report	. 15-1
Sample ISPR Face Sheet	. 15-4
Sample ISPR Segment Analysis Sheet	15-/
Procedure for Conducting a Job Analysis Study	
16. Plant Control Card and Staffing Table	16-1
Plant Control Card	16-1
Procedure for Preparing A Plant Control Card	. 16-1
Sample Plant Control Card	. 16-3
Staffing Table	16-4
Procedure for Preparing The Staffing Table	16-4
Sample Staffing Table Form	16-7
Alphabetical List of DOT Industries and Codes	16-9
17. Organization and Workflow Charts	1/-1
Organization Charts	1/-1
Sample Organization Chart	1/-3 17 1
Workflow Charts	
Sample Workflow Chart, Manufacturing Establishment	17-3 17-6
18. The Narrative Report	18-1
Compiling Data	18-1
Organizing Materials	18-1
Writing the Report	18-2
Sample Narrative Report	18-5
Appendix A: Breaking A Job Down Into Tasks	A-1
Appendix B: Determining Detail Needed In Job And Task Descriptions	B-1
Appendix C: Machines, Tools, Equipment, And Work Aids	C-1
Appendix D: Bibliography	D-1
Appendix E: Agency Identification Numbers For Occupational Analysis	E-1

CHAPTER 10

TEMPERAMENTS

Temperaments, a component of Worker Characteristics, are the adaptability requirements made on the worker by specific types of jobs. The 11 Temperament factors identified for use in job analysis are:

- **D DIRECTING**, controlling, or planning activities of others.
- **R** Performing **REPETITIVE** or short-cycle work.
- I INFLUENCING people in their opinions, attitudes, and judgments.
- V Performing a VARIETY of duties.
- **E EXPRESSING** personal feelings.
- A Working ALONE or apart in physical isolation from others.
- S Performing effectively under STRESS.
- T Attaining precise set limits, TOLERANCES, and standards.
- U Working UNDER specific instructions.
- P Dealing with PEOPLE.
- J Making JUDGMENTS and decisions.

The category Temperaments is one of the components of job analysis because different job situations call for different personality traits on the part of the worker. Experience in placing individuals in jobs indicates that the degree to which the worker can adapt to work situations is often a determining factor for success. A person's dissatisfaction or failure to perform adequately can sometimes be attributed to an inability to adapt to a work situation rather than to an inability to learn and carry out job duties.

DEFINITIONS AND EXAMPLES OF THE TEMPERAMENT FACTORS

The 11 Temperament factors are defined below. Following each definition are examples of worker activities which illustrate the Temperament.

- **DIRECTING**, Controlling, or Planning Activities of Others: Involves accepting responsibility for formulating plans, designs, practices, policies, methods, regulations, and procedures for operations or projects; negotiating with individuals or groups for agreements or contracts; and supervising subordinate workers to implement plans and control activities.
- D:1 Teaches elementary school pupils academic, social, and manipulative skills.
- D:2 Plans, implements, and coordinates program to reduce or eliminate occupational injuries, illnesses, deaths, and financial losses.
- D:3 Commands ship to transport passengers, freight, and other cargo across oceans and coastal waters, coordinating activities of crewmembers.
- D:4 Conducts prosecution in court proceedings on behalf of city, county, State, or Federal Government
- D:5 Supervises and coordinates activities of personnel engaged in operation of air-traffic control tower.

- R Performing REPETITIVE or Short-Cycle Work: Involves performing a few routine and uninvolved tasks over and over again according to set procedures, sequence, or pace with little opportunity for diversion or interruption. Interaction with people is included when it is routine, continual, or prescribed.
- R:1 Addresses envelopes, cards, and similar items for mailing, by hand or using typewriter.
- R:2 Feeds flat strips of hoop steel, in which rivet holes have been punched, into rollers of machine to form barrel hoops.
- R:3 Packs layer of crushed ice on fresh food products packed in barrels, boxes, or crates to refrigerate them during shipment.
- R:4 Loads and unloads materials from trucks at shipping and receiving platform.
- R:5 Sorts incoming or outgoing mail into mail-rack pigeonholes or into mail sacks according to destination.
- I INFLUENCING People in their Opinions, Attitudes, and Judgments: Involves writing, demonstrating, or speaking to persuade and motivate people to change their attitudes or opinions, participate in a particular activity, or purchase a specific commodity or service.
- I:1 Writes advertising copy for use by publication or for broadcast to promote sales of goods or services.
- I:2 Persuades producers and announcers of radio and television musical shows to broadcast recordings produced by record manufacturer.
- I:3 Introduces new fashions and coordinates promotional activities, such as fashion shows, to induce consumer acceptance.
- I:4 Demonstrates products to customers to promote sales, displaying product and explaining features to customers.
- I:5 Conducts safety meeting to acquaint plant personnel with potential hazards and need to comply with all safety regulations.
- Performing a VARIETY of Duties: Involves frequent changes of tasks involving different aptitudes, technologies, techniques, procedures, working conditions, physical demands, or degrees of attentiveness without loss of efficiency or composure. The involvement of the worker in two or more work fields may be a clue that this temperament is required.
- V:1 Schedules appointments, gives information to callers, takes dictation, and otherwise relieves officials of clerical work and minor administrative and business details.
- V:2 Consults with management; observes jobs; interviews workers; compiles and analyzes occupational data; compiles reports; and transmits occupational information to facilitate personnel, administrative, and management functions of organization.
- V:3 Assists physician in formulation of prescription for prosthesis; examines and evaluates patient's prosthetic needs; formulates design of prosthesis; selects material; makes casts, measurements, and model modifications; performs fitting; evaluates prosthesis on patient; instructs patient in use of prosthesis; and maintains patient records.
- V:4 Plans itinerary for hunting and fishing trips; arranges for transporting individuals, equipment, and supplies; explains hunting and fishing laws; prepares meals; and provides first aid to injured.
- V:5 Accommodates hotel patrons by registering and assigning guests to rooms; issuing room keys and escort instructions to bellhop; date-stamping, sorting, and racking mail; transmitting and receiving messages, using telephone; answering inquiries pertaining to hotel services and local shopping and dining facilities; keeping records of room availability and guests' accounts; computing bills; and collecting payments.

- EXPRESSING Personal Feelings: Involves creativity and self expression in interpreting feelings, ideas, or facts in terms of a personal viewpoint; treating a subject imaginatively rather than literally; reflecting original ideas or feelings in writing, painting, composing, sculpting, decorating, or inventing; or interpreting works of others by arranging, conducting, playing musical instruments, choreographing, acting, directing, critiquing, or editorializing.
- E:1 Writes humorous material for publication or performance, selecting topic according to personal preference.
- E:2 Paints variety of original subject material, conceiving and developing ideas for painting.
- E:3 Creates and teaches original dances for ballet, musical, or revue.
- E:4 Writes syndicated column on topics of reader interest to stimulate or mold public opinion.
- E:5 Designs and sculpts three-dimensional artwork.
- A Working ALONE or Apart in Physical Isolation from Others: Involves working in an environment that regularly precludes face-to-face interpersonal relationships for extended periods of time due to physical barriers or distances involved.
- A:1 Locates and reports forest fires and weather phenomena from remote fire-lookout station; reports findings to base camp by radio or telephone.
- A:2 Works below surface of water, using scuba gear or in diving suit, with air line extending to surface.
- A:3 Explores likely regions to discover valuable mineral deposits, using topographical maps, surveys, reports, and knowledge of geology and mineralogy. Stakes claim according to Federal or State legal requirements.
- A:4 Traps animals for pelts, live sale, bounty, or to relocate them to other areas. Sets traps, patrols trapline to remove catch, and resets or relocates traps.
- A:5 Drives gasoline- or diesel-powered tractor-trailer combination long distances to transport and deliver products.
- **S** Performing Effectively Under **STRESS**: Involves coping with circumstances dangerous to the worker or others.
- S:1 Controls and extinguishes fires to protect life and property; positions and climbs ladder to gain access to upper level of buildings or to assist individuals from burning building.
- S:2 Patrols assigned beat on foot, horseback, motorcycle, or in patrol car to control traffic, prevent crime or disturbance of peace, and arrest violators.
- S:3 Performs surgery to correct deformities, repair injuries, prevent diseases, and improve function in patients, using a variety of surgical instruments and employing established surgical techniques.
- S:4 Controls air traffic on and within vicinity of airport to prevent collisions; alerts support emergency crew and other designated personnel by radio or telephone when airplanes are having flight difficulties.
- S:5 Repairs and replaces transmission and distribution power lines between generating stations, requiring use of precautionary work methods and safety equipment due to electrical hazards present when working on or near energized conduction and electrical accessories.
- S:6 Pilots new, prototype, experimental, modified, and production aircraft to determine its airworthiness; puts aircraft through maneuvers, such as stalls, dives, glides, and speed runs to test and evaluate stability, control characteristics, and aerodynamic design.

- Attaining Precise Set Limits, TOLERANCES, and Standards: Involves adhering to and achieving exact levels of performance, using precision measuring instruments, tools, and machines to attain precise dimensions; preparing exact verbal and numerical records; and complying with precise instruments and specifications for materials, methods, procedures, and techniques to attain specified standards.
- T:1 Weighs, measures, and mixes drugs and other medicinal compounds and fills bottles or capsules with correct quantity and composition of preparation, following prescriptions issued by physician or dentist.
- T:2 Sets up and operates engine lathes to perform machining operations on metal or nonmetallic workpieces according to specifications, tooling instructions, standard charts, and knowledge of machinery procedures.
- T:3 Moves precisely in combination with other dancers and coordinates body movements with music to perform chorus dances.
- T:4 Establishes position of airplane, using navigation instruments and charts, celestial observation, or dead reckoning.
- T:5 Examines parachute and lines to detect deviations from specifications and flaws in materials and work, using glass-topped table or fluorescent light, and marks defective areas.
- T:6 Verifies and balances entries and records of financial transactions.
- Working UNDER Specific Instructions: Performing tasks only under specific instructions, allowing little or no room for independent action or judgment in working out job problems.
- U:1 Installs plastic molding strips into slotted edges of metal tabletops, using mallet and bandsaw.
- U:2 Mixes pharmaceuticals; issues medicines, labels, and stores supplies; and cleans equipment and work areas under direction of licensed, professional worker in hospital pharmacy.
- U:3 Weighs or measures, grinds, chops, and mixes specified quantities of ingredients to prepare animal food.
- U:4 Inspects materials and products for conformance to specifications, using fixed or preset measuring instruments.
- U:5 Bends and adjusts plastic or metal eyeglass frames according to prescription specifications, using jewelers' handtools.
- P Dealing with PEOPLE: Involves interpersonal relationships in job situations beyond receiving work instructions.
- P:1 Counsels parolees having difficulty in readjusting to the community following release from prison.
- P:2 Consults medical, nursing, and social service staffs concerning problems affecting patients' food habits and needs in order to formulate therapeutic diet menus compatible with each condition and treatment sequence.
- P:3 Guides hunters and fishers to game areas, explains hunting and fishing laws, and recommends suitable firearms or fishing tackle to take specific game or fish.
- P:4 Interviews job applicants to select persons meeting employee qualifications and informs applicants about job duties.
- P:5 Receives callers at establishment, determines nature of business, and directs callers to destination.

- J Making JUDGMENTS and Decisions: Involves solving problems, making evaluations, or reaching conclusions based on subjective or objective criteria, such as the five senses, knowledge, past experiences, or quantifiable or factual data.
- J:1 Examines paintings for color values, style of brushstroke, and aesthetic qualities to establish art period or to identify artist.
- J:2 Tests and inspects products at various stages of production process and compiles and evaluates statistical data to determine and maintain quality and reliability of products.
- J:3 Plans layout of newspaper edition determining placement of stories based on relative significance, available space, and knowledge of layout principles.
- J:4 Evaluates individual applications for insurance for degree of risk involved and accepts applications following company's underwriting policies.
- J:5 Examines food samples to determine sales appeal in restaurants; tastes prepared dishes to ascertain palatability and customer appeal.
- J:6 Appraises real property to determine value for purchase, sales, investment, mortgage, or loan purposes considering location and trends or impending changes that could influence future value of property.
- J:7 Examines and measures industrial diamonds to determine their quality, shape, and size, using classification standards and gauges.

PROCEDURE FOR RATING TEMPERAMENTS

Evaluate the work activities of the job for applicability of the Temperament factors by referring to the definitions of the factors. Select those factors considered to be important in relation to the kinds of adjustments which the worker must make for successful job performance. Do not assign Temperaments based on incidental work activities. Some simple jobs may require the worker to adjust to only one Temperament factor while other jobs may require adjustment to several. In Item 9 of the JAR enter the letter designation(s) of Temperament factor(s) considered to be important in relation to the kinds of adjustments which the worker must make for successful job performance.