APPENDIX B

EXPLANATION OF DATA, PEOPLE, AND THINGS

Much of the information in this publication is based on the premise that every job requires a worker to function, to some degree, in relation to Data, People, and Things. These relationships are identified and explained below. They appear in the form of three listings arranged in each instance from the relatively simple to the complex in such a manner that each successive relationship includes those that are simpler and excludes the more complex. (As each of the relationships to People represents a wide range of complexity, resulting in considerable overlap among occupations, their arrangement is somewhat arbitrary and can be considered a hierarchy only in the most general sense.)

The identifications attached to these relationships are referred to as Worker Functions, and provide standard terminology for use in summarizing how a worker functions on the job.

The fourth, fifth, and sixth digits of the occupational code reflect relationships to Data, People, and Things, respectively. These digits express a job's relationship to Data, People, and Things by identifying the highest appropriate function in each listing shown in the following table:

<table>
<thead>
<tr>
<th>DATA (4th Digit)</th>
<th>PEOPLE (5th Digit)</th>
<th>THINGS (6th Digit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Synthesizing</td>
<td>0 Mentoring</td>
<td>0 Setting Up</td>
</tr>
<tr>
<td>1 Coordinating</td>
<td>1 Negotiating</td>
<td>1 Precision Working</td>
</tr>
<tr>
<td>2 Analyzing</td>
<td>2 Instructing</td>
<td>2 Operating-Controlling</td>
</tr>
<tr>
<td>3 Compiling</td>
<td>3 Supervising</td>
<td>3 Driving-Operating</td>
</tr>
<tr>
<td>4 Computing</td>
<td>4 Diverting</td>
<td>4 Manipulating</td>
</tr>
<tr>
<td>5 Copying</td>
<td>5 Persuading</td>
<td>5 Tending</td>
</tr>
<tr>
<td>6 Comparing</td>
<td>6 Speaking-Signalling</td>
<td>6 Feeding-Offbearing</td>
</tr>
<tr>
<td></td>
<td>7 Handling</td>
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<tr>
<td></td>
<td>8 Taking Instructions-Helping</td>
<td></td>
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</tbody>
</table>

Definitions of Worker Functions

DATA: Information, knowledge, and conceptions, related to data, people, or things, obtained by observation, investigation, interpretation, visualization, and mental creation. Data are intangible and include numbers, words, symbols, ideas, concepts, and oral verbalization.

0 Synthesizing: Integrating analyses of data to discover facts and/or develop knowledge concepts or interpretations.

1 Coordinating: Determining time, place, and sequence of operations or
action to be taken on the basis of analysis of data; executing determinations and/or reporting on events.

2 Analyzing: Examining and evaluating data. Presenting alternative actions in relation to the evaluation is frequently involved.

3 Compiling: Gathering, collating, or classifying information about data, people, or things. Reporting and/or carrying out a prescribed action in relation to the information is frequently involved.

4 Computing: Performing arithmetic operations and reporting on and/or carrying out a prescribed action in relation to them. Does not include counting.

5 Copying: Transcribing, entering, or posting data.

6 Comparing: Judging the readily observable functional, structural, or compositional characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

PEOPLE: Human beings; also animals dealt with on an individual basis as if they were human.

0 Mentoring: Dealing with individuals in terms of their total personality in order to advise, counsel, and/or guide them with regard to problems that may be resolved by legal, scientific, clinical, spiritual, and/or other professional principles.

1 Negotiating: Exchanging ideas, information, and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions, or solutions.

2 Instructing: Teaching subject matter to others, or training others (including animals) through explanation, demonstration, and supervised practice; or making recommendations on the basis of technical disciplines.

3 Supervising: Determining or interpreting work procedures for a group of workers, assigning specific duties to them, maintaining harmonious relations among them, and promoting efficiency. A variety of responsibilities is involved in this function.

4 Diverting: Amusing others, usually through the medium of stage, screen, television, or radio.

5 Persuading: Influencing others in favor of a product, service, or point of view.

6 Speaking-Signaling: Talking with and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to helpers or assistants.

7 Serving: Attending to the needs or requests of people or animals or the expressed or implicit wishes of people. Immediate response is involved.

8 Taking Instructions-Helping: Attending to the work assignment instructions or orders of supervisor. (No immediate response required unless clarification of instructions or orders is needed.) Helping applies to "non-learning" helpers.
THINGS: Inanimate objects as distinguished from human beings, substances or materials; and machines, tools, equipment, work aids, and products. A thing is tangible and has shape, form, and other physical characteristics.

0 Setting Up: Preparing machines (or equipment) for operation by planning order of successive machine operations, installing and adjusting tools and other machine components, adjusting the position of workpiece or material, setting controls, and verifying accuracy of machine capabilities, properties of materials, and shop practices. Uses tools, equipment, and work aids, such as precision gauges and measuring instruments. Workers who set up one or a number of machines for other workers or who set up and personally operate a variety of machines are included here.

1 Precision Working: Using body members and/or tools or work aids to work, move, guide, or place objects or materials in situations where ultimate responsibility for the attainment of standards occurs and selection of appropriate tools, objects, or materials, and the adjustment of the tool to the task require exercise of considerable judgment.

2 Operating-Controlling: Starting, stopping, controlling, and adjusting the progress of machines or equipment. Operating machines involves setting up and adjusting the machine or material(s) as the work progresses. Controlling involves observing gauges, dials, etc., and turning valves and other devices to regulate factors such as temperature, pressure, flow of liquids, speed of pumps, and reactions of materials.

3 Driving-Operating: Starting, stopping, and controlling the actions of machines or equipment for which a course must be steered or which must be guided to control the movement of things or people for a variety of purposes. Includes such machines as cranes, conveyor systems, tractors, furnace-charging machines, paving machines, and hoisting machines. Excludes manually powered machines, such as handtrucks and dollys, and power-assisted machines, such as electric wheelbarrows and handtrucks.

4 Manipulating: Using body members, tools, or special devices to work, move, guide, or place objects or materials. Involves some latitude for judgment with regard to precision attained and selecting appropriate tool, object, or material, although this is readily manifest.

5 Tending: Starting, stopping, and observing the functioning of machines and equipment. Involves adjusting materials or controls of the machine, such as changing guides, adjusting timers and temperature gauges, turning valves to allow flow of materials, and flipping switches in response to lights. Little judgment is involved in making these adjustments.

6 Feeding-Offbearing: Inserting, throwing, dumping, or placing materials in or removing them from machines or equipment which are automatic or tended or operated by other workers.

7 Handling: Using body members, handtools, and/or special devices to work, move, or carry objects or materials. Involves little or no latitude for judgment with regard to attainment of standards or in selecting appropriate tool, object, or materials.