

POSITION CLASSIFICATION STANDARD FOR OFFICE DRAFTING SERIES, GS-1021

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SERIES DEFINITION

This series includes positions involving the supervision or performance of drafting work for charts, diagrams, floor plans, office forms, and other types of graphic presentation of statistical, administrative, or related data. Positions in this series require skill in the application of drafting techniques, ability to read statistical tables and make arithmetical computations, and knowledge of the various types of graphic presentation that are appropriate for portrayal of statistical, administrative, and related data.

This standard supersedes the standard for the Statistical Drafting Series issued in August 1943 under the code CAF-1540, subsequently recoded to GS-1533. The Statistical Drafting Series, GS-1533, is hereby abolished.

EXCLUSIONS

1. Positions involving the supervision or performance of final drafting or scribing work in the preparation of topographic, hydrographic, cadastral, planimetric, aeronautical, geologic, land use, political, economic, or other types of maps and charts, requiring knowledge of cartographic practices and procedures. (See [Cartographic Technician Series, GS-1371](#).)
2. Positions involving the supervision or preparation of drawings for the purpose of documenting and communicating engineering or architectural ideas and information and requiring practical knowledge of engineering drafting methods and procedures. (See [Engineering Drafting Series, GS-0818](#).)
3. Positions concerned with supervising, laying out, or executing illustrations and which require the application of artistic ability to pictorialize information. (See [Illustrating Series, GS-1020](#).)
4. Positions involving the planning and design of visual materials for printed material, exhibits, and presentations, requiring the ability to determine what photographs, illustrations, diagrams, graphs, models, slides, and charts convey visually the information designed for a specific audience. (See [Visual Information Series, GS-1084](#).)
5. Positions the duties of which are to advise on, administer, supervise, or perform work involved in collecting, editing, computing, compiling, analyzing, and presenting statistical data, where the work requires knowledge and application of statistical methods, procedures, and techniques, but does not require professional knowledge of the mathematical or statistical theories, assumptions, or principles upon which they are based. (See [Statistical Assistant Series, GS-1531](#).) For positions involving a combination of office drafting and statistical clerical work, see the policy for mixed-grade positions in the [Introduction to the Position Classification Standards](#).

NATURE OF THE OCCUPATION

Office draftsmen in the Federal Government are responsible for graphic presentations of many types of statistical, administrative, and related data, depending on the mission of the department or agency where they are located. These data may be of a general nature or of a specialized or technical nature, such as medical, economic, and budgetary data. Graphic presentation of data is needed for internal office use, exhibits, lectures, slides, moving pictures, and television, and for books, magazines, pamphlets, reports, newspapers, and similar publications.

Performance of office drafting work requires skill in the use of office drafting equipment, including accurate use of measuring devices; ability to read statistical tables and to make arithmetical computations; and, for most positions, ability to lay out or design various types of charts, such as those listed below. Draftsmen frequently work under the pressure of close deadlines for printing dates and lecture engagements.

Office draftsmen are required to have the ability to use drafting and drawing equipment and the ability to apply the principles of perspective. Some office draftsmen perform duties which require some use of tone shading, color harmony, proportion, etc. However, the purpose of office drafting duties is to portray the relationship of data through the application of drafting techniques. Such drafting duties do not require the use of artistic ability (e.g., for the purpose of producing an emotional effect) as is required in illustrating work.

Office draftsmen are required to be familiar to varying degrees with the design of most types of charts used for graphic presentation of data. The following are some of the types of charts that they work on:

1. Rectilinear coordinate charts, such as simple arithmetic line charts, and strata charts.
2. Bar and column charts, such as plain bar, component bar, and percentage bar charts which may be vertical or horizontal, also called barographs, pipe-organ charts, or staircase charts.
3. Semilogarithmic charts which show rate of change or percentage of gain or loss represented by logarithmic division of the vertical scale.
4. Frequency and related distributions, including histograms, two-way frequency charts, and cumulative-frequency charts.
5. Miscellaneous charts and diagrams, such as pie charts, scatter diagrams, correlation charts, flow charts, organization charts, assembly charts, time-study charts, floor plans, office forms, and statistical maps or geographical charts including base maps, crosshatched or shaded maps, spot maps, and maps with graphic forms superimposed.
6. Charts which make use of symbolic figures to represent quantities; symbolic figures are frequently used in bar charts, flow charts, and geographic charts, sometimes called pictorial charts or pictograms.

7. Charts drawn in three-dimensional graphic form, a technique frequently used for pie charts and bar charts.

Office drafting work may be done in black-and-white or in color and in any of the art media. It is frequently done in pen-and-ink with the use of shading patterns and screens printed on a transparent film with a wax back which adheres to the drawing for crosshatching, shading, or coloring of certain areas of the drawing. In addition to various types of pens, inks, paints, and shading sheets (described above), some examples of equipment typically used by office draftsmen are compasses, ellipse guides, triangles, T-squares, curves, drafting scales, slide rules, mechanical lettering sets, and cold-type composing machines. Many office draftsmen are required to do cold-type composing for titles, captions, texts of pamphlets, etc.

In order to prepare work for publication, draftsmen are required to know how to use colors for reproduction, the effects produced by photographic enlargement or reduction of their work, the proper use of overlays, halftones, etc., and other means of increasing the numbers of effects possible in graphic presentation of statistical, administrative, and related data.

Office draftsmen frequently are required to work with people in other information and arts occupations, such as illustrating or visual information, as members of a team on joint projects. Some draftsmen are required to deal directly with employees and supervisors requesting drafting work. This involves finding out how the requestors want the job to be done, advising them on the manner in which they should present the data to be drafted, and requesting further information when the data submitted are incomplete.

Persons who are requesting drafting of technical numerical data usually give verbal instructions on the type of chart they want; frequently they provide a rough layout or make reference to a chart done previously to serve as a guideline. Office draftsmen are not required to have the technical subject-matter knowledge necessary for analysis of technical data in order to determine the proper type of graphic presentation. However, some data which are drafted can be readily understood by the layman; draftsmen may interpret these data and determine what type of chart would be most appropriate. Making a layout for graphic presentation of data (chart design) involves such determinations as the size of the chart, what scale or proportions should be used, position and margins, and composition including what size lettering should be used and where the lettering should be placed. A draftsman may make several layouts of one job and let the requestor select the one he prefers. The draftsman then puts this in final form. Draftsmen are required to have the ability to acquire enough information about the data being drafted to make an effective graphic presentation.

TITLES

The basic title for positions in this series is *Office Draftsman*.

The basis for this title is the nature of the drafting work performed by employees of positions included in this series, not their organizational location. These positions are typically located in Information, Publication, or Graphic Arts organizations; sometimes they are located in the subject-matter organization requiring drafting work.

Supervisory positions are not described in this standard although they are included in this series.

When supervisory duties and responsibilities constitute a substantial, regular part of an office draftsman's work and are of such significance as to require specific supervisory qualifications, the position should be designated as *Supervisory Office Draftsman* and should be evaluated by the criteria in the [General Schedule Supervisory Guide](#).

CRITERIA FOR DETERMINING GRADE LEVEL

The grade level of an office draftsman's position is measured by application of the following two basic classification criteria taken together:

1. *Nature of assignments.* -- This refers to the variety in types of graphic presentation worked on and the guidelines provided. Variety is reflected in the types of charts, forms, and diagrams required by the organization(s) and/or publication(s) serviced. The extent to which guidelines are provided is reflected by such aspects as whether the draftsman himself makes layouts and makes determinations affecting the style of the chart, such as size, margins, proportions, lettering, and possible use of three-dimensional drawing, or whether rough layouts are provided or specific standards specifying the design of the charts have been set up for him to follow. This factor is affected by the originality required for the accomplishment of assignments.

2. *Degree of supervision received.* -- This refers to the manner in which assignments are received and work is reviewed; whether supervision is close and continuous, general and in the nature of a review, or administrative only, i.e., all work is accepted as technically correct.

NOTES ON EVALUATION

The following knowledge, skills, and abilities involved in office drafting are not treated as separate factors in differentiating between the grade levels of positions in this series because they are common to all levels or are reflected by the classification criteria mentioned in the preceding section. All of these abilities are not required in every position.

1. The ability to make arithmetical computations, to make measurements with slide rules and other measuring devices, and to plot points on a graph.
2. The ability to type or use composition equipment.

3. The ability to do freehand drawing of figures, that need not be realistic, used in the presentation of data.
4. Ability to carry on personal contact work with people requesting drafting services for the purpose of gathering routine information, such as size of chart desired, date when needed, etc. (This is reflected by the degree of supervision received on projects to the extent that it influences grade level.)
5. Degree of subject-matter knowledge of the data being drafted. (This is reflected by the guidelines received to the extent that it influences grade level.)

Grade levels of positions in this series are affected to a large degree by the nature of the work situation in which the position is located. Some organizations want all of their drafting work done in the same style and require only a few types of charts due to the nature of the data they have to be drafted. The grade levels of positions of draftsmen servicing such organizations are generally not found above the GS-3 level; they are limited by factors which are inherent in their work situation.

Other organizations make greater demands in the way of style and variety. Office draftsmen servicing these organizations have an opportunity to advance above the GS-3 level if they receive assignments typical of work performed at the higher levels and have the knowledge and abilities necessary for these levels. Note that some office draftsmen who are capable of performing work at the higher levels are restricted to a lower level because of limited assignments which are due to limitations inherent in the demands of the organizations serviced. Positions at the GS-6 level and above are not described in this standard because of their highly individualized nature.

Review of plotting, lettering, and other aspects of charts for accuracy has no effect on the grade level of either the draftsman or the reviewer. This review is similar to proofreading and is common to all grade levels since most charts are prepared for publication and must be double-checked for accuracy; it may be done at a lower grade level than that of the draftsman performing the drafting work.

Some positions responsible for performing drafting assignments typically found at the lower grade levels may receive supervision from personnel other than those in the information and arts field. In evaluating these positions, it is the nature of the supervision received that is important, not the source of the supervision.

OFFICE DRAFTSMAN GS-1021-02

This is typically a trainee level; however, it includes some limited performance jobs responsible for routine office drafting work that are not trainee positions. Work at this level requires the ability to use basic office drafting equipment. Assignments are simple and limited in variety; guidelines and instructions are specific and are followed under close supervision.

GS-2 office draftsmen work on a few types of graphic presentations such as line charts, bar charts, organization charts, placards, and signs. They are required, after some training, to have a working knowledge of all of the office drafting equipment available to them. They are provided with rough layouts or are given charts done previously to use as guides, and are provided with specific directions. Work on the revision of charts done previously is typical at this level. Some assignments may be more difficult than those described above in order to prepare draftsmen in trainee positions for work at the higher levels. Supervision at this level includes specific instructions before and during assignments, and close review of completed assignments to see that guidelines and instructions have been followed properly and that work is of an acceptable quality.

OFFICE DRAFTSMAN GS-1021-03

Assignments at this level are varied but have well-established guidelines. Rough layouts or specific oral or written instructions are provided for new assignments.

GS-3 office draftsmen typically receive such assignments as bar, line, pie, and organizational charts; statistical and administrative maps; and posters. They do freehand and mechanical lettering and use a variety of inks, paints, and colors. Most assignments at this level recur on a regular basis; they typically involve use of shading techniques requiring varied types of hatching and color, overlays, and the use of logarithmic and variable scales.

Assignments typically performed at this level on a recurring basis receive little supervision during progress but are closely reviewed upon completion. New assignments are explained in detail and are closely supervised. Supervision of recurring assignments at this level is proportionately less close.

An example of a position at this level is that of a draftsman who, with specific instructions, prepares graphs, charts, maps and diagrams, assists in the preparation of difficult graphic projects by performing the less difficult segments on a production-line technique basis, does freehand and mechanical lettering, lays out or traces and rules statistical tables and forms, and uses such materials as zip-a-tone, color and design tape, water colors, and crayons.

OFFICE DRAFTSMAN GS-1021-04

Assignments at this level cover a wide variety of drafting jobs, including some one-of-a-kind assignments. GS-4 office draftsmen are required to make layouts from data received in tabular or narrative form. Rough layouts or instructions from the supervisor for style and scale are given for those assignments that are unique or infrequent.

GS-4 office drafting work covers a wide variety of assignments and requires the ability to perform the full range of drafting work requiring the use of standard methods for graphic presentation of statistical, administrative, and related data. In addition to graphic presentations mentioned at the lower levels, this includes such assignments as floor plans, office forms, flow charts, and book covers. GS-4 assignments typically involve all standard types of plotting, coloring, and other detail work and require a knowledge of a variety of methods, such as effects produced by use of overlays and halftones, to be used in preparing charts, graphs, etc., for reproduction.

Assignments are received with general instructions, are carried out with spotchecks for unique assignments, and are reviewed upon completion. The supervisor gives advice on unusual problems.

An example of a position at this level is that of a draftsman who, under general supervision, receives assignments accompanied by statistical tabulations, rough sketches, and instructions as to the desired type of presentation. Assignments consist of work order requests for graphic presentation of statistical data and other types of information of a medical, budgetary, organizational, workflow, or historical nature in a variety of arrangements, such as horizontal and vertical bar charts, arithmetic and logarithmic line charts, pie charts, scatter and frequency diagrams, statistical maps, etc. As required, the draftsman works on covers for reports, booklets, and other publications; does drafting and cold-type composing for reports, booklets, etc.; prepares certificates using freehand and Old English lettering; traces maps and illustrations; and draws floor plans to scale.

OFFICE DRAFTSMAN GS-1021-05

Positions at this level require greater versatility and originality than those at the GS-4 level. Assignments are varied and complex; they are at a level of difficulty requiring the use of special techniques. Assignments typically require a new approach and the use of other than standard methods. GS-5 office draftsmen perform design and layout of graphic presentations. This involves a determination of the type of chart or graph that will portray the data most effectively and will also be appropriate for the publication, audience, or other use for which it is needed.

GS-5 office draftsmen frequently cooperate on joint projects with others in the information and arts field, such as illustrators, visual information specialists, and editors. They sometimes participate in the design of covers and layout of texts for reports, booklets, and other publications.

GS-5 office draftsmen receive assignments with general instructions and work without technical supervision. Work may be subject to review by subject-matter specialists, editors, illustrators, or others working on publications for which drafting work is done.

Draftsmen performing work at this level may work on one general type of data or on data from a wide variety of subject-matter fields stemming from a number of different organizations; in any case, this work involves a wide variety of graphic presentations as illustrated by the following.

An example of a position at this level is that of a draftsman who, on the basis of general instructions only, independently selects approaches, materials, and work methods and plans layouts for a wide variety of types of graphic presentations of economic data. Wide variety refers to a scope in the types of graphic presentations comparable to the following: rectilinear coordinate charts, bar charts, semilogarithmic charts, frequency distribution, pie charts, scatter diagrams, correlation charts, flow charts, and statistical maps. Working for a staff of economists, the draftsman designs and drafts new charts on a regular basis to meet new methods of presentation or adjustments in scale required by changing economic conditions.