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Electronics Engineer 12

GS-0855-12

I. INTRODUCTION

NOTE: THE SENTENCE IN PART I DESCRIBING THE PURPOSE OF THE POSITION AND PARTS II AND III IN THEIR ENTIRETY ARE PERMANENT PARTS OF THE LIBRARY AND MAY NOT BE CHANGED OR EDITED IN ANY WAY.

This position is located in

Serves as an electronics engineer for an organization, project or team providing a full range of electronics engineering services.

II. MAJOR DUTIES AND RESPONSIBILITIES

The engineer applies deep and diversified electronics engineering expertise to atypical or highly difficult assignments of a particular functional area relating to one or more of the following activities: planning, designing, developing, constructing, altering, cost estimating, inspecting, testing, or analyzing electronics circuit elements, equipment, systems and subsystems that encompass a wide assortment of electronics material used in such activities as detection, ranging, viewing, illuminating, surveying, data processing and voice and data transmission.

Duties may include: designing or performing production engineering for the latest, state-of-the-art equipment to be integrated into systems; reviewing or developing the installation instructions for systems which have a number of physically separate and technologically different components; developing the specifications for the repair, modifications, and testing of new types of systems with many component pieces of equipment where the procedures serve as the type standard for other activities with similar engineering design and support missions; determining and redesigning major failure problems or instabilities within assigned systems by locating problems and determining how to correct them, prescribing changes in materials used, and/or developing new calibration procedures.

III. FACTOR LEVELS

1. Knowledge Required by the Position FL 1-7, 1250 pts

Knowledge of professional electronics engineering concepts, principles, and techniques applicable to a full range of duties concerned with the design, evaluation, and analysis of various characteristics of electronics circuits, elements, equipment, systems, subsystems and material used in a wide assortment of electronics functions and capabilities. Additionally, a full comprehension of the relationships between assigned and related areas and branches of engineering, such as mechanical and electrical is required in order to provide a full range of engineering support for electronics systems design, assessment, analysis, maintenance and installation activities.

2. Supervisory Controls FL 2-4, 450 pts

Supervisor gives assignments in general terms of objectives and priorities. The engineer receives assignments within his/her subject-matter or functional area without instructions. The engineer determines the nature of the question and issues involved and independently plans and carries out the investigation, analysis and details of the work. Highly unusual or controversial problems are handled in consultation with the supervisor, but in most

cases, the employee independently plans and carries out the work. Completed work is reviewed for adequacy in meeting objectives and to ensure conformance with agency policies.

3. Guidelines FL 3-4, 450 pts

Guidelines include such publications as agency regulations, technical literature, manufacturer's catalogs, and policy statements issued by the headquarters engineers. Technical guides have limited applicability to many problems encountered. As a technical specialist, the employee must exercise judgment and creativity in deviating from such traditional methods as may be available and adapts and develops new methods as required.

4. Complexity FL 4-5, 325 pts

Assignments involve new designs, design modifications, requirements definitions and engineering studies and evaluations and analysis and recommendation of public policy issues. They are diverse in nature and cover a number of essentially different electronics systems and equipment. The engineer must deal with several complex features including modifying the original design to solve interconnecting difficulties with other specializations and scheduling requirements necessary to integrate various phases of the work. Considerations also include costs which may necessitate compromise between a theoretical ideal method and economy, devising departures from previous test methods and techniques and substituting for standardized materials not available

5. Scope and Effect FL 5-4, 225 pts

The purpose of the work is to provide technical expertise in the analysis, design, testing, procurement, installation or operation of complex electronics systems. Assignments are concerned with solving unusual or controversial operational, design or policy issues and problems. Work has a direct impact on a wide range of the organization's mission essential electronic systems and subsystems and precedent setting policy issues.

6. Personal Contacts FL 6-3, 60 pts

Contacts are with engineers in the same and other disciplines, projects and systems managers and laboratory and test site personnel, as well as with representatives of other governmental organizations, contractors, manufactures and vendors.

7. Purpose of Contacts FL 7-3, 120 pts

Contacts are for obtaining and exchanging information, coordinating projects and resolving technical scheduling and budgeting problems, and resolving program and policy issues. The engineer provides technical and management liaison to contractors, production facilities, and agency personnel involved in supporting assigned tasks and coordinates resolution of program issues with appropriate personnel. The engineer must use considerable tact and persuasion in convincing contractor, and agency personnel of the necessity of proceeding as required for attainment of project/program goals.

8. Physical Demands FL 8-1, 5 pts

Work is normally sedentary, although bending, climbing, and crawling are necessary on some assignments.

9. Work Environment FL 9-1, 5 pts

Work is usually performed in an office or laboratory setting.

TOTAL POINTS- 2890

This position is exempt from coverage under the Fair Labor Standards Act.

IV. UNIQUE REQUIREMENTS

(Last Updated: November 4, 1994)

