Home > HR Practitioners > Classification & Position Management > PD Library

# Geodesist 12

## GS-1372-12

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.

## I. INTRODUCTION

This position serves as a geodesist involved in observing, reducing, adjusting, and analyzing geodetic survey data to produce latitudes, longitudes, height information and maps, charts and related products.

#### II. MAJOR DUTIES AND RESPONSIBILITIES

Designs and carries out geodetic projects, operations, and studies. Translates objectives into specifications and procedures such as for geodetic surveys by GPS relative positioning techniques. Documents procedures for the daily use of operational systems.

Consults with project planners to evaluate proposals for geodetic surveys or related products to determine geodetic requirements; prepares and reviews cost estimates.

Conducts critical review of numerous new and revised survey projects, data and proposals, and related products. Verifies that appropriate data are correctly applied and portrayed, and that final products are complete and accurate.

Conducts research on difficult or complex situations, including where litigation is involved or where inquiries require complex and detailed replies.

Develops and improves computer software programs required for data compilation needs, quality control analyses, and entry and validation for data base and archival requirements; as requested, analyzes needs for refinements and automation in the processing and reduction software for space geodesy survey data and assists in the design of systems to meet identified needs; and prepares documentation and user guidelines.

Keeps abreast of developments in space geodesy systems, such as Doppler, GPS, VLBI, and satellite laser ranging and of technological advancements in applications of these systems to higher accuracy geodetic requirements such as crustal dynamics, geoid modeling, and establishment of Spatial Reference Systems.

Prepares technical correspondence and reports; authors or co-authors scientific papers for publication or for presentation at technical meetings.

### **III. FACTORS**

1 - Knowledge Required by the Position. Knowledge of geodetic theories, concepts, principles, practices and equipment, including those used in satellite surveying with the Global Positioning System, optical astronomy, surveying, geography, mathematics, computer science or other techniques, sufficient to evaluate source material, research, analyze, select, and prepare geodetic materials.

Knowledge of techniques to solve problems; Knowledge of principles, theories, and practices of geodesy in order to make significant departures from previous approaches to accommodate specialized assignments, and provide staff advisory, planning, and reviewing services.

Knowledge of computers including using and/or programming FORTRAN and/or C programs, data base management concepts, personal computers and remote computer terminals in order to analyze, adjust and store geodetic data.

- 2 Supervisory Controls. Supervisor provides general direction. Planning and methodology is developed by employee in consultation with supervisor. Independently plans own work, interprets policy in terms of established objectives, and keeps supervisor informed of progress and major or potentially controversial issues. Completed work is typically accepted as technically accurate, and is subject to broad review for meeting objectives.
- 3 Guidelines. Guidelines consist of standard instructions, local policies, and handbooks which are often inadequate in dealing with difficult assignments. Employee uses judgment and initiative in applying guidelines, deviating from established techniques and developing new methods, criteria or proposed new policies. Employee is often recognized as a technical authority in the development and interpretation of guidelines.
- 4 Complexity. The work involves a high degree of scientific and technical originality and judgment. Sometimes, solutions to one may be in direct conflict with the solutions of another. Assignments/projects produce state-of-the-art, comprehensive technical and assessment reports. The work requires creation of new techniques and approaches to meet objectives.
- 5 Scope and Effect. Work involves assessment of program effectiveness, planning, management, and coordination of one or more major segments of the unit's operation. The employee develops new specifications and procedures and provides technical advice and guidance covering a broad range of geodetic activities. The work affects a wide range of major aspects of NOAA's geodetic programs.
- 6 Personal Contacts. Personal contacts are with individuals or groups outside the employing agency including individuals from the private sector desiring special coordinate products. Contacts are in an unstructured setting.
- 7 Purpose of Contacts. Contacts are established to plan and coordinate work, reach agreement on requirements for coordinate production, and advise on and resolve problems confronting others concerning contract requirements. Groups are basically cooperative and work toward mutual goals.
- 8 Physical Demands. Work is primarily sedentary. There may be some walking, standing, bending; carrying light items (e.g. papers, small books). A valid driver's license may be required to drive an automobile in the performance of duties.
- 9 Work Environment. Work is performed in a typical office setting. The work area is adequately lighted, heated, and ventilated.

## **IV. UNIQUE POSITION REQUIREMENTS**

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

(Last Updated:)

Website Feedback About OHRM Contact Us DOCHROC FOIA Site Map
Privacy Policy Commerce Homepage Careers at Commerce
Commerce Employees HR Practitioners