## DEPARTMENT OF INDUSTRIAL RELATIONS DIVISION OF LABOR STATISTICS & RESEARCH

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## SCOPE OF WORK PROVISION

### FOR

FIELD SURVEYOR: CHIEF OF PARTY (018.167-010) INSTRUMENTMAN (018.167-034) CHAINMAN/RODMAN (869.567-010)

IN

## ALPINE, AMADOR, AND CALAVERAS COUNTIES

The information in this packet is not based on a collective bargaining agreement.

## Source:

Dictionary of Occupational Titles, Fourth Edition, Revised 1991 O\*NET 98, The Occupational Information Network, Viewer Version 1.0

## United States Department of Labor Office of Administrative Law Judges Law Library



# DICTIONARY OF OCCUPATIONAL TITLES Fourth Edition, Revised 1991

## 018.167-010 CHIEF OF PARTY (profess. & kin.)

Leads work of survey party under direction of LAND SURVEYOR (profess. & kin.), performing surveying duties not requiring licensure.

GOE: 05.03.01 STRENGTH: L GED: R5 M5 L4 SVP: 7 DLU: 77

## 018.167-034 SURVEYOR ASSISTANT, INSTRUMENTS (profess. & kin.)

Obtains data pertaining to angles, elevations, points, and contours used for construction, map making, mining, or other purposes, using alidade, level, transit, plane table, Theodolite, electronic distance measuring equipment, and other surveying instruments. Compiles notes, sketches, and records of data obtained and work performed. Directs work of subordinate members of survey team. Performs other duties relating to surveying work as directed by CHIEF OF PARTY (profess. & kin.).

GOE: 05.03.01 STRENGTH: L GED: R5 M5 L4 SVP: 7 DLU: 77

## 869.567-010 SURVEYOR HELPER (any industry)

Performs any of following duties to assist in surveying land: Holds level or stadia rod at designated points to assist in determining elevations and laying out stakes for mapmaking, construction, mining, land, and other surveys. Calls out reading or writes station number and reading in notebook. Marks points of measurement with elevation, station number, or other identifying mark. Measures distance between survey points, using steel or cloth tape or surveyor's chain. Marks measuring points with keel (marking crayon), paint sticks, scratches, tacks, or stakes. Places stakes at designated points and drives them into ground at specified elevation, using hammer or hatchet. Cuts and clears brush and trees from line of survey, using brush hook, knife, ax, or other cutting tools. May perform duties as directed by LAND SURVEYOR (profess. & kin.) or SURVEYOR ASSISTANT, INSTRUMENTS (profess. & kin.). May perform one operation and be designated Brush Clearer, Surveying (any industry); Staker, Surveying (any industry); Surveyor Helper, Chain (any industry); Surveyor Helper, Rod (any industry).

GOE: 05.12.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

## O\*NET 98 Occupational Definition and Tasks



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## 22311B Surveyors

### Definition

Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

#### **Tasks**

- 1. Plans ground surveys designed to establish base lines, elevations, and other geodetic measurements.
- 2. Determines photographic equipment to be used, altitude from which to photograph terrain, and directs aerial surveys of specified geographical area.
- 3. Drafts or directs others to draft maps of survey data.
- 4. Prepares survey proposal or directs one or more phases of survey proposal preparation.
- 5. Surveys water bodies to determine navigable channels and to secure data for construction of breakwaters, piers, and other marine structures.
- Analyzes survey objectives and specifications, utilizing knowledge of survey uses.
- 7. Determines appropriate and economical methods and procedures for establishing survey control.
- 8. Computes data necessary for driving and connecting underground passages, underground storage, and volume of underground deposits.
- 9. Coordinates findings with work of engineering and architectural personnel, clients, and others concerned with project.
- 10. Establishes fixed points for use in making maps, using geodetic and engineering instruments.
- 11. Prepares charts and tables and makes precise determinations of elevations and records other characteristics of terrain.
- 12. Computes geodetic measurements and interprets survey data to determine position, shape, and elevations of geomorphic and topographic features.
- 13. Conducts research in surveying and mapping methods using knowledge of techniques of photogrammetric map compilation, electronic data processing, and flight and control planning.
- 14. Locates and marks sites selected for geophysical prospecting activities, such as locating petroleum or mineral products.
- 15. Estimates cost of survey.

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## 22311B Surveyors

- 16. Studies weight, shape, size, and mass of earth, and variations in earth's gravitational field, using astronomic observations and complex computation.
- 17. Takes instrument readings of sun or stars and calculates longitude and latitude to determine specific area location.
- 18. Keeps accurate notes, records, and sketches to describe and certify work performed.

## O\*NET 98 Occupational Definition and Tasks



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22521A Surveying Technicians

**Definition** Adjust and operate surveying instruments, such as the theodolite and electronic

distance-measuring equipment, and compile notes, make sketches and enter data into

computers.

#### **Tasks**

1. Obtains land survey data, such as angles, elevations, points, and contours, using electronic distance measuring equipment and other surveying instruments.

- 2. Compiles notes, sketches, and records of survey data obtained and work performed.
- 3. Directs work of subordinate members of party, performing surveying duties not requiring licensure.