

### NATURAL RESOURCES PHOTOGRAMMETRIC TECHNICIAN

DESCRIPTION: Under limited supervision coordinates photogrammetric work for section; performs independent technical photogrammetric tasks utilizing Softcopy and CAD technologies; performs related work as required.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Determines what is needed and directs the preparation and assembly of photogrammetric survey materials.

Prepares estimate of time required to perform photogrammetric surveys.

Responsible for preparing and maintaining project survey records, reports and delivery transmittals.

Uses the aerial analytical triangulation program to compute supplemental control points for stereomodels; analyzes results for best fit to ground control coordinates.

Compiles planimetric and topographic maps, collects and records planimetric and topographic features, breaklines, and random points for use in terrain programs using Softcopy and CAD programs.

Operates digital scanner to digitize aerial photography.

Responsible for maintenance of stereoplotters and associate equipment.

Responsible for making "back-up" file(s), on tape or other media, of each map and data file recorded during compilation of the mapping.

Evaluates stereo photography for use in mapping.

Trains technicians in the use of stereoscopic instruments and computer systems.

FULL PERFORMANCE KNOWLEDGE, ABILITIES AND SKILLS REQUIRED: (These may be acquired on the job and are needed to perform the work assigned.)

Knowledge of: photogrammetric methods and their limits; project survey needs; camera, ground control; camera reports; back-up system(s) and method(s); Computer Aided Drafting (CAD); Microsoft Windows NT; Bundle-type Aerial Triangulation (AT) programs; Softcopy digital photogrammetric workstation and associated programs.

Ability to: write instructions for new procedures; estimate labor for projects; determine needs based on information from scoping meetings; ongoing reports, notebooks, listings and correspondence; visualize the potential of flights.

NATURAL RESOURCES PHOTOGRAMMETRIC TECHNICIAN (continued)

ENTRY KNOWLEDGE, ABILITIES, AND SKILLS REQUIRED: (Applicants will be screened for possession of these through written, oral, performance, and/or other evaluations.)

Knowledge of: principles and techniques of surveying, cartography and photogrammetry; mathematics, including geometry, trigonometry and survey computations; principles of Softcopy photogrammetry; and state plane coordinates.

Ability to: utilize CAD technology in 2 space 3D with Softcopy digital plotters and other computer systems; recognize the limits of photogrammetric methods.

Skill in: evaluating results from computations; manipulating files to detect placement errors in lines, cells, and mass point data.

JOB PREPARATION GUIDELINES: (Entry knowledge, abilities, and/or skills may be acquired through, BUT ARE NOT LIMITED TO, the following coursework/training and/or experience.)

Any combination of training and/or experience that will enable the incumbent to possess the required knowledge, abilities, and skills. A general qualification guideline for positions in this class is high school education or equivalent AND education or experience in survey and photogrammetry.