65479

Specification for Class of

PHOTOGRAMMETRIST 2 Abolished Initially Effective January 13, 2006 Abolished Final Effective February 10, 2006

<u>Definition</u>: Performs professional photogrammetric engineering tasks requiring independent judgment and action, and/or acts as project leader for photogrammetric projects.

Typical Work

Project Leader for mapping programs/projects including: with division/region coordination engineering, planners, scientists; project scheduling; control and flight planning; aerotriangulation; compilation, edit and final publication or archive of map products/data; or serves as a lead on a secondary shift;

Leads compilation of precise 3D digital terrain models, planimetric, and topographic map detail of areas where extensive photo-interpretation and judgement is required;

Determines road alignments for engineering purposes, determines image point coordinates and manipulates the data through use of computers in 2D and 3D data formats and operates precision Stereo Photogrammetric instruments;

Performs large-block analytical aerotriangulation adjustments for orthophoto and/or photogrammetric mapping projects or photogrammetric surveys;

Performs earthwork/quantity calculations to determine cuts/fills, stockpile volumes, quarry or pit removals, etc.;

Solves difficult and complex problems, conducts extensive analysis to locate errors including control identification, geodetic control and hardware and software malfunctions;

Participates with the Survey Unit in photogrammetric and geodetic surveys;

Assists the Photogrammetry Supervisor in solving special photogrammetric mapping problems such as testing new procedures, instrument adaptation, and special purpose research;

Prepares detailed technical reports with recommendations to Photogrammetry Supervisor;

Operates a large format document/photo scanner;

Edits and evaluates photogrammetric work performed by consultants and performs necessary translations of their data for various Engineering Design Programs;

Administers training programs to photogrammetric trainees; determines the methods and techniques to be used, personally conducts special training classes;

Compiles and produces data/maps necessary for photogrammetric retracement of General Land Office (GLO) surveys;

Designs, creates and implements computer programs for digital photogrammetric applications on various computer systems and in various programming languages;

Acquires, processes, reformats digital or other photogrammetric data from USGS, USFS, city, county, or other sources for use in agency photogrammetric applications;

Performs field liaison, designs and prepares aerial photogrammetric projects, including flight planning, cost and time estimates, and checking aerial photography for geometric orientation and alignment;

Maintains and adjusts photogrammetric instruments;

Performs other duties as required.

Knowledge and Abilities

Knowledge of: basic mathematics of photogrammetry and surveying; highway/natural resource engineering needs; stereoscopic instruments and photogrammetric applications; topographic and cartographic practices; aerial photographic and photo-lab techniques; field procedures for control survey, CADD procedures and computer operations; planning and estimating (time and cost)

of photogrammetric projects; map accuracy evaluation; principles of effective supervision.

Ability to: operate photogrammetric instruments and related equipment on all mapping assignments; perform aerotriangulation and process 2D and 3D digital data; may plan and supervise work of others on project or temporary basis; administer group training programs.

Minimum Qualifications

Two years of experience as a Photogrammetrist 1 within the agency.

OR

Four years of experience performing professional photogrammetric tasks which includes operating precision photogrammetric instruments.

An associate degree in photogrammetry, cartography, civil engineering, geodesy, geography, forestry, or related field will substitute for one year of the experience.

A Bachelor's or higher degree in photogrammetry, cartography, civil engineering, geodesy, geography, forestry, or related field will substitute for two years of the experience.

NOTE: Ability to see stereoscopically and normal color perception is required.

New class: 12-10-93