Job Class Profile: **Aerial Photographic Technician II**

Pay Level: **CG-29** **Point Band:** **622-675**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	3	2	4	4	3	3	4	2	
Points	187	50	13	19	120	65	62	86	21	623

JOB SUMMARY

The Aerial Photographic Technician II plans, organizes and engages in the activities and resources of an archiving unit providing a variety of advanced complex technical services related to the production of cartographic aerial survey and digital imagery.

Key and Periodic Activities

- Photogrammetric Scanning – Digitally capturing a full frame aerial photograph at a geometric resolution, 2000dpi or 12.5 um per pixel, for use in the making of ortho-rectified images or line maps. Creates, reformats and maintains digital map components using GIS software.
- Graphic Scanning - Digitally capturing a full frame aerial photograph at a geometric resolution of 600dpi or less for display and photo interpretation.
- Calibrating Photogrammetric and Graphic Scanners – calibrate scanners in the Photogrammetric and Graphic Units.
- Image Setting – Non-destructive editing, where the original signals are not modified in the course of editing, instead the edits themselves are edited. Images consist of digital photographs, traditional analog photos or illustrations using software programs such as Photoshop and Silverfast Ai.
- Manages the production environment by providing the technical consultation to staff and clients on aerial photography and cartographic reproduction, collating, checking, filling and packaging orders to prepare for shipping.
- Supervises, evaluates and verifies employee's performance; identifies staff development and training; implements and maintains health and safety programs.
- Archives digital imagery by cataloguing the digital imagery collection and managing information and records. Finding space to store analog and digital imagery.
- Prepares the budget for photographic supply and negotiating for resources. Plans and manages a budget and organizes contractual arrangements with suppliers.
- Researches, evaluates and recommends innovative systems/equipment, processes and procedures for the digital imaging unit
- Maintains statistical reports for management.

Key and Periodic Activities
— Composes correspondence. — Calibrates all equipment (scanners, printers to International Color Consortium (ICC)) so that every piece of equipment produces the same colour. **Competencies:** — Operate and calibrate specialized equipment. — Budget preparation and monitoring. — Apply technical concepts and approaches; implement quality control and standards. — Research innovative systems/equipment, processes and procedures.

SKILL

Knowledge
General and Specific Knowledge: — Knowledge of related computer software applications. — Knowledge of photogrammetric and graphic scanner calibration, operations and maintenance. — Knowledge of aerial imagery technology, techniques and processes. — Knowledge of digital photography. — Specialized knowledge of work methods and approaches. **Formal Education and/or Certification(s)** — Minimum: 2 Year Specialized Technical Diploma in Photography, image enhancement and digital imagery, aerial photography, related software and technology and specialized training on scanning equipment operation, calibration and repair. **Years of Experience:** — Minimum: 2 - 3 years
Interpersonal Skills
— A range of interpersonal skills are used to listen to information from others, ask questions to gain information, provide routine information and direction to others, communicate complex ideas to others and deal with upset people both on the phone and in person. Negotiates contracts, makes formal presentations for clients or staff on laboratory services and products, communicates to gain the cooperation of others and provides expert advice. — Communications occur with employees in the immediate work unit to check on progress and deal with problems; with supervisors to report on activities; and with customers to determine needs and find a solution to complaints. — Most significant contacts are with employees within and outside the department and with suppliers to obtain quotes and discuss what is new in the field.

EFFORT

Physical Effort
— Work demands do not result in considerable fatigue requiring periods of rest. Work provides

the opportunity to stand and walk within the environment.
— Occasionally required to lift rolls of film (10-25 lbs.) into scanners and carry boxes of supplies and also works in cramped or awkward positions.
— Work alternatively requires periods of regular sitting to perform activities. Occasionally
— Fine finger precision work is occasionally required when using the computer mouse and keyboard to edit and colour correct images and in using hand tools.

Concentration

— **Visual** concentration is a constant requirement while scanning and image editing.
— Tasks are repetitive and require **alertness** to maintain consistency and quality. For example, about 500 photos used in making a map and each print must be the same tone and DPI with little tolerance for variance. Occasionally alertness is required to ensure the health and safety of others when working on 220 amp equipment.
— There are regularly **time pressures and interruptions** due to customer requests, special requests for immediate filling (i.e. police, search and rescue) and reacting to machinery malfunction/breakdown.
— **Exact results and precision and eye hand co-ordination** are also required for tasks requiring visual concentration.

Complexity

— Work typically involves tasks that are repetitive/well defined with some different but related allowing for the use of similar skills and knowledge.
— There are challenges or problems that must be defined and practical solutions found. Some of these require support from factory technicians as work is performed using specialized photogrammetric equipment. Activities include repairs to equipment. Manuals and user guides are also used for reference purposes.
— Work is specialized and highly technical in nature.

RESPONSIBILITY

Accountability and Decision-Making

— Work tasks and activities are highly monitored and controlled as quality control is a priority.
— Decisions can be made in requesting small parts for immediate repairs, requesting staff for part time help in the laboratory and approving overtime if funds are budgeted.
— Discretion and judgement are used in making decisions when dealing with clients and developing solutions to meet their needs.
— Discretion within predetermined limits and procedures is exercised when following guidelines for handling equipment and materials and maintaining confidentiality of orders from private companies such as mining companies.

Impact

— Impacts generally affect the immediate work area, department, within and outside the organization and by clients.
— Work activities impact equipment processes and systems, information finances, material resources and corporate image. For example, the laboratory provides aerial photos to

external clients and other government departments and generates revenue; quality standards must be met and product provided in a timely manner. — Consequences of errors can be extreme on the immediate work area, within and outside the department and on customers/clients as errors lead to delays in production and inability to supply required data on time.
Development and Leadership of Others
— Responsible for ongoing supervision for a small size work group (1 to 4 employees).

WORKING CONDITIONS

Environmental Working Conditions
— Safety equipment is not required although health and safety guidelines, procedures and practices are followed in carrying out duties. — The likelihood of minor injury or illness and fractures is limited. — Occasional exposure to undesirable environmental conditions such as fumes, hazardous chemicals, limited lighting, electrical shock and awkward or confining spaces.