Job Class Profile: **Cartographic Technician**

Pay Level: **CG-30**   **Point Band:**   **676-689**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	3	3	5	4	4	3	5	2	
Points	187	50	19	24	120	87	62	107	21	677

JOB SUMMARY

The Cartographic Technician provides technical supervision to staff involved in the creation of the digital forest inventory database process. Work involves project management, scheduling, assignment of duties and monitoring of progress to ensure efficient workflow, technical support and troubleshooting. Responsible for the final quality control of database layers. Also oversees the Air Photo and Map Library.

Key and Periodic Activities

— Supervises staff involved in the creation of the digital forest inventory database process which involves project management, scheduling, assignment of duties and monitoring of progress to ensure efficient workflow, technical support and troubleshooting.
— Carries out final quality control procedures to ensure a high degree of accuracy and standard of digital map layers.
— Provides training and technical support to staff and, therefore, must be proficient in all software and processes utilized in the digital forest inventory mapping process.
— Maintains a log book and other map based progress/status tools to ensure overall work flow of staff.
— Oversees the operation of the Air Photo and Map Library.

SKILL

Knowledge

General and Specific Knowledge:
— Knowledge of Photogrammetry related software and applications.
— Knowledge of GIS applications software.

Formal Education and/or Certification(s):
— Minimum: 2 Year Diploma in Forestry Technology supplemented by GIS courses, or 2 Year Diploma in Computerized Mapping, or Geographic Information Systems.

Years of Experience:
— Minimum: 3-4 years.

Interpersonal Skills

> — Interpersonal skills are used mainly to receive and listen to information from others, ask questions, provide routine information and direction to others and gain the co-operation of others to complete work and solve problems.
> — Majority of interaction occurs with employees to provide direction and ensure co-operation; manager in the immediate work area to report and seek guidance; and with technical support staff (Systems Analysts) to resolve problems. Communication also occurs with Inventory Section who provide the photos used in the digital database creation process.
> — Has contact with government employees outside the department, clients/customers, suppliers, students and departmental executives.

EFFORT

Physical Effort

— Occasionally required to lift objects, such as photos, that are less than 10 lbs.
— Some standing/walking when gathering photos, assisting staff and monitoring activities.
— Constant use of a mouse and keyboard for fine finger and precision when performing quality control on digital maps using a computer. Tasks involve repetitive movement of hands, shoulders and neck.

Concentration

— **Visual** concentration or alertness, the need **for exact results and precision and eye/hand coordination** while checking work for accuracy/ performing Quality Control is required on a regular basis.
— There are occasional **time pressures and interruptions**.
— Work involves **repetition requiring alertness**.

Complexity

— Majority of tasks are repetitive/well defined or different but related and allow for the use of similar skills and knowledge. Work is performed with defined and standard work processes.
— Occasionally there are simple challenges with obvious solution or issues that are well defined with a limited number of solutions and/or can be addressed by following procedures or guidelines.
— Occasionally there are diverse tasks involving a wide variety of responsibilities and situations and tasks for which a limited number of guidelines or procedures exist. There are also regular challenges or problems that must be defined and practical solutions found.
— A typical challenge is when ortho rectified photos do not overlay properly and has to be investigated to determine why this occurred, i.e. scanned upside down or numbered incorrectly.
— Effective use of the software products and the requirement to provide support and training to subordinates require the incumbent to learn the products extremely well. Troubleshooting requires experience and intuition.
— Manuals, user guides, computer support and specialized staff are available as references or resources.

RESPONSIBILITY

Accountability and Decision-Making
— Work tasks and activities are highly monitored or controlled. There are multiple steps in the process, with each successive step dependant on the others. Mistakes impede efficient workflow and overall production. While mistakes are picked up during quality control, they must be corrected and steps repeated. — Schedules, assigns and monitors work of other technicians. — Supervisor's approval is required to make purchases. — Performs quality control on work completed by other technicians and has some discretion to make minor changes to photo interpretation to ensure efficiency of the process when required. Adds or removes arcs that are needed to make the interpretation correct.

Impact
— There are various human and automated quality control procedures in place. Each photo is visually checked against the final map/database to ensure accuracy and completeness of data. Computer programs are used to identify potential database and/or coding errors. — Results are directly felt within the immediate work area. Mistakes are found and corrected/steps repeated by staff in the work area. — Consequences of errors are moderate and felt on human resources, processes and systems, information. — Mistakes are resolved within hours of problem identification.

Development and Leadership of Others
— Responsible for supervision for a medium size work group (5 to 10 employees).

WORKING CONDITIONS

Environmental Working Conditions
— The likelihood of injury or illness does not apply. — There are limited adverse working conditions from computer screen glare and open office environment.