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FINAL

**NAV CANADA / ATS 2245 CAW  
Classification System Renewal  
Job Evaluation Factor Descriptors  
and Levels for Discussion with  
the Working Group**

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## Technical Skill/Knowledge

This factor measures the depth and breadth of technical knowledge a position requires to successfully carry out the responsibilities of the position. This considers the depth of a specific field of technical knowledge and the breadth of knowledge (i.e. multiple fields of technical knowledge) required. Expertise is developed through a combination of formal education, specialized training, and/or on-the-job experience.

Note:

A field of technical knowledge may have its own education, training and/or experience requirements. Examples of technical fields of knowledge are:

- Basic Training (FSS Courses – inclusive of Gander Unit Specific Training)
- AWBS (Aviation Weather Briefing Service)
- Unit Qualification Training Program
- Training Design/Delivery

Within the context of this factor “supervision/leadership” is NOT a field of knowledge (as it is typically never the sole purpose of the role).

- Depth of knowledge essentially measures the requirement to learn and/or develop and use the tools, techniques, concepts and theories in a single area/field of knowledge.
- Breadth of knowledge measures the requirements to have expertise in more than one technical area/field - this typically reflects broader responsibility.

## Level Definition and Guidelines

Level 1	<p>A basic level knowledge in a specific technical discipline (e.g. AAS, IFSS). Requires knowledge of equipment; tools; programs (e.g. MIDS, NARDS, etc.); standards and regulations (e.g. CARs, Transport Canada, etc.). Has basic understanding of theories (such as lift/thrust/drag/weight and Bernoulli's principle); and comprehension of operational and/or administrative processes that apply to the position.</p> <p>Applies this knowledge to resolve defined and/or procedural requests, issues and problems in typically standardized situations of a technical nature within the context of established procedures and policies.</p>
Level 2	<p>A specialized knowledge of a single technical discipline requiring specialized training (e.g. AWBS) in addition to core training. Requires a thorough knowledge of specialized equipment and tools, programs; standards and regulations.</p> <p>Applies this knowledge to independently resolve defined and/or procedural requests, issues and problems in both standard and non-standard situations typically of a technical nature within the context of established procedures and policies. Positions at this level typically use multiple systems, and require more extensive on the job training (due to the unique characteristics and knowledge required of the sites' operations).</p>
Level 3	<p>An advanced in-depth knowledge of a single technical discipline in addition to core training, and operational systems processes and procedures. Requires a thorough technical and operational knowledge of equipment; tools and programs; standards and regulations and a thorough understanding of theories and operational and/or administrative processes that apply to the position.</p> <p>Applies this knowledge to resolve escalated, interpretational, and/or non routine or non procedural requests that may be vague or unclear. These issues may arise in non-standard and unique situations; typically of a technical nature within the context of established policies and precedents.</p>

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Level 4	An advanced knowledge of multiple fields of technical knowledge. Requires an advanced understanding and/or thought leadership perspective of operational systems, tools, equipment, theories and administrative procedures and processes. Applies this knowledge to resolve and interpret NAV CANADA processes and procedures, regulations, and/or non routine or non precedent requests, issues and problems on a national scope.
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## Thinking Environment

This factor measures and evaluates the thinking environment in which a position typically operates and in which the required skills and knowledge are applied. This factor applies to both operational and non-operational environments.

Note:

In the application of this factor consideration should be given to the following:

- Is the primary focus of the position operational or non-operational?
- What is the breadth and complexity of the variables that affect the thinking environment? Examples of variables include but are not limited to:
  - Aircraft configuration
  - Aircraft mix
  - Geography
  - Aircraft volume
- Availability of resources, both operational/technical and people
- Whether single or multiple sites must be considered in the thinking process?
- The breadth and level of complexity inherent in the variables impacting the thinking environment
- Are there single or multiple technical disciplines that affect the thinking environment?
- Are the thinking challenges somewhat predictable or unique and situation specific?

## Thinking Environment

### Level Definition and Guidelines

Level 1	Thinking environment is typically non-operational and not specific to just one location, region, or function. Thinking challenges are broad in nature and typically from a theoretical perspective. Fact finding and feedback is required from multiple sources both internal and external to NAV CANADA. Tasks and/or assignments while of a similar focus are each unique and situation specific.
Level 2	Thinking environment is typically operational and of low to moderate complexity. Limited demands to focus on more than one discipline at a time and generally restricted to situations involving own unit. While thinking challenges are influenced by a range of operational variables such as airport configuration, aircraft mix, volumes, and geography (to name a few examples) these factors are generally routine and do not require intensive effort to integrate and process through to delivery of course(s) of action. Access to operational resources are readily available (i.e. operational manuals, procedures, checklists, etc.) but access to supervisory/experienced resources may not be readily available at time of need.
Level 3	Operates in a complex operational and/or administrative environment. Operations are generally focused in one discipline, however may require multiple methods of application. Typically responsible for one location/unit but may also have multiple locations/units to monitor at same time. Thinking challenges are influenced by a broad range of operational variables such as airport configuration, aircraft mix, and geography (to name a few examples). These variables contribute to increased effort to develop solutions that must take into consideration moderate degrees of interdependency and/or constraints
Level 4	Operates in a high complexity environment where application of a broader range of disciplines is evident. Responsible for multiple locations/units requiring a significant and virtually continual demand for integration of multiple related or unrelated operational and/or non operational variables into consideration of courses of action. These variables contribute to a significant level of effort to develop solutions that must take into consideration high levels of interdependency and/or constraints.

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## Communication/Influencing Skills

This factor measures the skill required to effectively communicate, exchange, and share information; and the requirement to influence the behaviours, actions, and/or decisions of others.

This factor measures the level and application of skills required, in terms of:

- Communication skills – complexity of information being communicated, breadth of audience(s) for the message, and the difficulty of the content. It further measures the use and application of oral, observational, listening, speaking, written, and instructional presentation skills.
- Influencing – the degree of influencing required to effectively communicate to both external and internal audiences. It measures the use and application of skills to persuade and influence the decisions of others (where there is no formal control or responsibility) through activities such as conflict resolution, negotiation and directional or suggestive reasoning.

Note:

- It is important to assess the nature, purpose, extent, and characteristics of contacts with others (internal and external).
- Communication of a difficult or specialized nature (generally dealing with complex subject matter) typically requires formal training and/or extensive experience to enable the position to articulate and communicate in a meaningful fashion.
- Ratings should take into account any additional influencing skills such as empathy, sensitivity, and understanding of human behaviour and motivational techniques, the position may need to use on a regular basis. Unique or infrequent utilization of the above should not be considered.

## Communication/Influencing Skills

### Level Definition and Guidelines

Level 1	Contacts typically require explanation, clarification and interpretation of detailed technical information using more standard communication formats and styles. Contacts require a professional nature in relating to others, both internally and externally. Range of contacts is typically within one's own unit, or related units, and/or with users of core unit services.
Level 2	Contacts require the use of a variety of communication skills involving a level of comprehension and explanation, clarification and interpretation of detailed technical information of a specialized or complex nature, including the provision of advice and guidance to colleagues and/or users/stakeholders. Range of contacts is typically within one's own unit, related units, and with users of NAV CANADA's services.
Level 3	Contacts regularly involve dealing with diversified and/or complex information or issues. Considerable explanation, clarification and interpretation of procedures, processes and documentation of data is required. Tact, discretion, and persuasion may be required to obtain willing action or consent from other parties internal or external to the unit. Actively solicits and responds to feedback from customers and other parties probing for information as appropriate. Range of contacts is broad, typically within one's unit, related units, and with users of NAV CANADA's services.
Level 4	Contacts involve diversified and/or difficult communication. Considerable explanation, clarification and interpretation of information, documentation or data are required. Frequently required to influence actions or decisions using well developed influencing and negotiating skills to persuade others to adopt courses of action. Communication involves the use of descriptive language and careful articulation of theories, principles, policies, and procedures to other staff, operations personnel, key stakeholders, and/or external aviation industry agencies and staff. Determines and prepares appropriate media and content to fit the audience.

## Complexity of Thinking And Time Horizons

This factor consists of two sub-factors:

- A) Complexity of Thinking** which measures the complexity of skills relating to the application of knowledge as well as the complexity of thinking, problem solving and planning required by the position, and
- B) 'Time Horizons** which measures the time horizon in which the position is typically required to operate in order to respond to and solve issues and/or problems.

In the application of Complexity of Thinking consideration should be given to:

- The level of theoretical or technical complexity of materials and information used in the role.
- The level of skill required to set out and assist in the process of reasoning and conveying information.
- The required level of skills in using numbers for calculations, formula, equations and specialized mathematical functions.
- The ability to identify, process and comprehend critical elements of information within the overall work environment.
- The skill required to analyze and interpret a wide variety of data and procedures.

In the application of Time Horizons consideration should be given to the time constraints that impact the requirement of the position to respond to and/or recommend solutions to problems and/or procedural/policy issues. In the evaluation of this sub-factor consideration should be given to whether the position is primarily operational or non-operational.

Resources available and the time available to identify and solve problems must be considered when evaluating time horizons.

## A. Complexity of Thinking

### Level Definition and Guidelines

Level 1	Problems/issues are varied and on occasion, moderately complex, but are typically straightforward and focus is on consideration of factors/issues/situations at the unit level. Solutions require limited analysis, typically requiring a selection of solutions from established NAV CANADA policies and procedures and/or the application of standards and regulations, documented precedents or experiential knowledge. Information to solve the problem may be gathered from a limited number of sources which are generally known. Existing tools and processes are available and the use of personal experience, general judgment, and knowledge is applied.
Level 2	Problems/issues are varied and moderately complex, typically remaining within the immediate section or unit. Problem solving requires establishment of facts, detailed analysis and/or recommendations to modify establish procedures. Existing tools and processes are typically available, and the use of personal experience, significant judgment and knowledge applied. Solutions determined comply with organizational standards.
Level 3	Problem solving requires collection of information from wide and diversified sources with complex analysis and formulation of solutions and recommendations. Solutions frequently require modification of new procedures/methods within accepted NAV CANADA and industry standards and policies. Solutions may be presented as recommendations from a subject matter expert.
Level 4	Problem solving requires comprehensive analysis and interpretation, integrating information from a broad range of sources which may include operational feedback, industry initiatives, service providers, users and stakeholders, legislative/regulatory bodies, etc. Sources of information are not always readily identifiable or available. Thinking demands routinely use a subject expert or theoretical depth of knowledge. Positions routinely use the analysis to recommend policy and procedures that are modifications of existing NAV CANADA policies/procedures or training scenarios and materials.

## B. Time Horizons

### Level Definition and Guidelines

Level 1	Time horizons are substantial and not restrictive
Level 2	Time horizons are not normally restrictive.
Level 3	Time horizons may be restrictive.
Level 4	Time horizons are restrictive and typically require thinking challenges to be resolved in short time periods with opportunities to consult when practice and/or experience are unable to guide.

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## Responsibility for Leadership and Development

This factor measures the responsibility for either directly and/or indirectly leading and/or advising others. Leadership includes direct supervision, scheduling and work quality, mentoring, coaching, training, advising and counseling, and influencing and motivating. It also includes the requirement to exercise indirect leadership through functional guidance, technical direction and/or specialty advice to others.

Note: Leadership typically refers to:

- responsibility for staff assignments includes work coordination, scheduling, quality oversight, and technical problem solving as well as the responsibility for assisting in the performance assessment process;
- project responsibility involving coordination with others, internal and/or external to the organization, with responsibility for providing advice and recommendations to management based on results;
- consultative and advisory roles which impact both people and organizational operations; and
- technical direction where no formal reporting relationship exists.

### Level Definition and Guidelines

Level 1	Incumbents work collaboratively with others as part of a team. Occasionally work procedures may be explained to new or inexperienced employees
Level 2	Incumbents are not responsible for the ongoing leadership of a team but provide technical leadership and guidance on the interpretation on NAV CANADA/industry policies/procedures across the organization as well as course curricula to students.
Level 3	Supervision of team/unit staff is a primary function of the role. Supervisory duties typically include assigning work, maintaining quality and work output norms, coaching, advising, instructing, directing or mentoring workers, and coordinating unit activities. Typically responsible for inputting to performance and conducting proficiency reviews and assessment.

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## Independence and Authority

This factor measures the autonomy and authority to develop recommendations and/or make decisions by considering the degree of direction received and/or exercised by supervisors and managers, as well as the restrictions placed on the role by standard practices, policies, and regulations that assist in decision making. Typically, the less defined the direction received the greater the requirement to exercise sound judgment to make decisions.

Note:

- This factor deals with the decision making requirements of the position. Decisions are typically based on the complexity inherent in the work environment as well as the context, variety and difficulty of the information upon which decisions are made.
- Decision making requires interpretation, a review and consideration of how best to apply the available direction (e.g., procedures, policies, guidelines, regulations, etc.) based on precedents, as well as the knowledge and experience required for the position. Knowledge and experience is typically used in drawing conclusions, evaluating alternatives and/or in making decisions.
- In determining the overall level of independence inherent in the position, consider the range of typical decisions made and their complexity. Decisions may be procedural, technical, functional, organizational, corporate and/or financial in nature. The independence and authority of any position may be constrained by the limits placed on the position by other positions in the organization/system that determine or establish work flow, practices, and procedures.

## Independence and Authority

### Level Definition and Guidelines

Level 1	Decisions are made based on interpretation of well established practices, documented standards, and well established precedents and experience. Decisions typically involve selection from available established approaches and minimal adaptation or modification would be applied. May refer unusual problems to supervisor.
Level 2	Works under general direction and guidance. Decisions are made based on interpretation of well-defined NAV CANADA policies and procedures, regulatory standards, and, precedents, and/or accepted technical/professional standards. Decisions require the application of personal experience and knowledge, and typically involve adaptation and selection from a number of different alternatives.
Level 3	Works under general guidance and typically develops recommendations on behalf of the unit or section. Recommendations are made based on adaptation of accepted technical and service objectives, regulatory standards, and understanding of company objectives. May assist unit and/or section leaders implement specified actions/or decisions within unit or section.
Level 4	Works under broad guidance. Recommendations typically focus on new and/or amended procedural and policy changes; and the development of technical materials. Recommendations made affect a significant operating system or process and level of service within a department.

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## Organizational Influence

This factor measures the organizational influence of typical actions including recommendations and decisions that are normally within the authority of the position to make. The influence may be “operational or non-operational” (e.g. delivery of aviation services, efficiency of the organization, and quality/accuracy of services), “reputational” (affecting the reputation of the organization with customers, the public, regulators, and/or employees), or “financial” (revenue and/or expenses).

This factor appraises the likelihood and probable impact of actions resulting from the application of judgment.

Note:

When appraising organizational influence, consider only typical consequences, not rare or extreme possibilities. The influence of decisions or actions is typically diminished by those systems/controls designed and put in place to limit influence. Consider the influence in terms of some of all of the following:

- Safety of the air navigation system and wellbeing of the aviation community;
- Embarrassment in customer/public/business or employee relations;
- Embarrassment to NAV CANADA;
- Disruption or delay of service;
- Impact on traffic flow and efficiency;
- Safeguarding of restricted information;
- Accuracy of reports and documentation;
- Loss of time in detecting and correcting an error;
- Damage or loss involving equipment, instruments, property, etc.;
- Employee morale; and
- Financial losses.

## Organizational Influence

### Level Definition and Guidelines

Level 1	Actions, recommendations, and/or decisions could affect customer service and/or the efficiency and timeliness of unit services as related to colleagues and immediate customers, but would not affect the achievement of overall unit/section objectives. Actions and/or consequences are temporary and/or repairable and may incur overtime or expense to correct.
Level 2	Actions, recommendations, and/or decisions affect customer service and/or the efficiency and timeliness of services provided by the unit(s)/section(s) directly or indirectly to users. These actions will affect the achievement of overall unit/section objectives. Actions and/or consequences are substantial and require time and expense to correct.
Level 3	Actions, recommendations and/or decisions affect the achievement of units'/sections' objectives; and impact customer service, operating efficiency, financial expenditures and public and/or employee relations over a significant time period. Actions and/or consequences are repairable, but typically require intervention by NAV CANADA management and require significant time and expense to correct.
Level 4	Actions, recommendations, and/or decisions affect the achievement of a department/function's objectives. Significant short-term to mid-term consequences are expected. Actions, recommendations or decisions influence the achievement of NAV CANADA key organizational objectives, standards, and operating efficiencies. Actions and/or consequences are repairable, but require intervention by senior NAV CANADA management and require long time horizons and expenses to correct.

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## Effort

### Physical Effort

This factor measures the degree and/or severity of physical exertion while considering frequency, intensity, and duration of the efforts associated with the position. This includes but is not limited to extensive sitting, driving, standing, walking, repetitive movement, climbing, and/or the moving/lifting of materials and equipment.

Note: In the evaluation of physical effort consider:

- the need for a combination of precision, accuracy, and speed of repetitive movements;
- the dexterity determined by the frequency of, and duration in the use and/or coordination of fine or coarse movements;
- the degree to which the job requires working at a specified location (e.g. extended standing and/or sitting) with limited opportunity to move; and
- the choice of action available to seek relief or perform less demanding physical tasks.

## Physical Effort

### Level Definition and Guidelines

Level 1	Light effort, no undue fatigue, typically involves a combination of sitting, standing and walking. Freedom to move at will. Lifting, pushing, or pulling lightweight objects may be required. Tasks performed require minimal coordination of fine or coarse body movement
Level 2	Moderate effort. Approximately 25% of the time. Activities such as keyboarding (or other movements requiring fine motor control and repetitive movement), driving, walking or standing. Occasionally, working at a fixed position with limited opportunity for movement. May occasionally be required to climb ladders and stairs. Tasks performed require occasional accurate coordination of fine or coarse movements.
Level 3	Considerable effort. Approximately 50% of the time. Activities such as keyboarding, walking or standing for more than 50% of the workday. Frequently working in a fixed location with limited opportunity for movement. Regularly required to climb ladders and stairs. Tasks performed require regular, accurate coordination of fine or coarse movements.
Level 4	Significant effort. Approximately 75% of the time. Activities such as keyboarding, standing, driving, walking and climbing. Tasks typically require frequent accurate coordination of fine or coarse movements.

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## Mental / Sensory Effort

Mental Effort and Concentration – This factor measures the degree and severity of mental intensity resulting from sensory, visual, and/or listening concentration required by the position under typical circumstances. Concentration includes activities such as listening, interpreting, reading, attentiveness to detail, observing; in combination with or the individual use of the five senses, (sight, taste, smell, touch and hearing) as required by the position.

### Note:

In the evaluation of this factor consider duration, continuity, and frequency of the sensory effort and/or mental concentration.

## Mental/Sensory Effort

### Level Definition and Guidelines

Level 1	Light effort, no undue fatigue. Some sensory attention on various phases of work, including reading of work related materials such as procedures and documentation, answering calls and for checking of information.
Level 2	Moderate effort. Approximately 25% of the time. Sensory concentration is necessary in the attention to detail required to prepare written or electronic materials, use of computer software and programs to maintain traffic picture, word processing, and/or periods of short interval driving. Visual and/or listening concentration with choice of action.
Level 3	Considerable effort. Approximately 50% of the time. Concentration on precision work, report writing, detail attentiveness and/or frequent driving. Limited employee coaching, training and instruction. Visual and/or listening concentration is required for approximately 50% of the workday with some choice of action.
Level 4	Significant effort. Approximately 75% of the time. Constant attention is required to use and monitor a wide variety of computer software and information systems, for documentation and/or data analysis, usually most of working day. Frequent listening concentration is required for recurring coaching, training and instruction.

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## Multiple Demands and Priorities

This factor measures the extent to which the position is exposed to multiple and often conflicting demands and/or priorities that are typically beyond the control of the individual where there is no choice to reschedule activities. Conflicting multiple demands and/or changing priorities may be caused by others (i.e. customers, supervisors, and co-workers) or may be caused by the local work environment in which the position is located.

Note: in rating this factor consider:

- The predictability of schedules, and related work flow activities.
- Disruptions to work life caused by internal and external factors.
- Ability and control to reschedule activities.

## Multiple Demands and Priorities

### Level Definition and Guidelines

Level 1	For the most part, priorities do not vary once they are established, but there are infrequent uncontrollable interruptions that cause unexpected changes in the pace of work. Schedules and deadlines are mostly predictable. There are “peak periods”, during which the pace of work accelerates, but they are predictable and there is typically advance notice of changes in tasks.
Level 2	There are occasional uncontrollable interruptions to work flows that cause changes in priorities and in the pace/flow of work. Schedules and deadlines are relatively predictable, but are subject to change on a regular basis, at times unexpectedly, which can result in conflicting deadlines.
Level 3	There are frequent interruptions imposed or controlled by others, with little or no control over or notice about switching tasks or changing priorities. Schedules and/or priorities are subject to frequent and unpredictable change. Deadlines regularly conflict, requiring careful prioritizing.
Level 4	There are constant interruptions to work flow/pace. Incumbents must deal with multiple schedules, demands and/or deadlines that change constantly and without warning. Schedules and/or priorities are imposed by others, are unpredictable, and frequently conflict with each other.

## Working Conditions and Environment

This factor measures the conditions and the environment under which the work must be performed and the extent to which the position is exposed to unpleasant and/or potentially dangerous conditions/hazards. This factor considers both the nature of the condition/hazard, its intensity, frequency, and/or its duration (i.e. length of time).

Unpleasant conditions refer to any physical discomfort that may be caused by the condition/environment but normally results in no adverse health effects and/or injury.

Dangerous conditions or hazards refer to those conditions/hazards/environment where there is a clearly identifiable risk of damage to health and/or physical injury. These conditions also include psychological affects of isolation, verbal abuse, and/or threat of physical harassment.

Note:

- In rating this factor consider the many and varied conditions that prevail in the workplace. Consider only those conditions /hazards which are readily identifiable in the nature of the work.
- Do not consider extreme situations, that is where the risk of a specific situation/accident/injury occurring is unlikely.
- Consider the availability of protective equipment, tools and equipment to mitigate risks.

To evaluate an appropriate level consider the frequency and duration of exposure to the following conditions and hazards.

<b>Unpleasant Conditions</b>	<b>Hazards</b>
Fumes – Aircraft Intake	Risk of carpel tunnel syndrome (i.e. keyboarding)
Lack of Privacy	Snow
Noise	Animals
Internal/External Weather	Climbing ladders
Environmental Odours and Smells	
Climbing Stairs	
Location of Instrumentation	
HF Radio	

## Working Conditions and Environment

### Level Definition and Guidelines

Level 1	Employees in this position are <b>rarely</b> (approximately 10% of the time) exposed to unpleasant conditions.
Level 2	Employees in this position are occasionally (approximately 25% of the time) exposed to unpleasant conditions; OR Employees in this position are <b>rarely</b> exposed to potential physical hazards
Level 3	Employees in this position are regularly (approximately 50% of the time) exposed to unpleasant conditions; OR Employees in this position are occasionally exposed to potential physical hazards
Level 4	Employees in this position are frequently (approximately 50 to 75% of the time) exposed to unpleasant conditions; AND/OR Employees in this position are regularly exposed to potential physical hazards.