

APPENDIX 2 to ANNEX A

RESOURCES' TECHNICAL EVALUATION for Professional, Airworthiness, Engineering and Program Support Services (PAEPSS)

*** These resources will be evaluated in the Task Authorization (TA) process and will not be evaluated at the RFP stage**

Table 1: Airworthiness Certification - Aircraft, Group 1

Mandatory Requirements
1. Must have a degree, or equivalent, from a recognized post-secondary institution* in a field of engineering or applied science. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of three (3) years' experience within the last ten (10) years, in the specialist field of military and/or civil aircraft certification.
3. Must have demonstrated experience in three (3) of the five (5) certification specialist activities listed below. Cite a minimum of one example for each response.
a. Planning, organizing and coordinating project activities involved in an aeronautical product certification program.
b. Review and analysis leading to airworthiness approval of a Certification Basis for a new aeronautical product certification program or a major design change to an existing aircraft design.
c. Review and analysis leading to airworthiness approval of a Certification Plan for a new aeronautical product certification program or a major design change to an existing aeronautical product design.
d. Preparing certification program related correspondence and briefings to communicate airworthiness issues.
e. Providing airworthiness certification advice for the development of airworthiness certification policies and processes.
f. Representing an airworthiness authority at national or international airworthiness meetings, committees, or policy-making forums
4. Must have formal airworthiness certification specialist training provided by either Transport Canada Civil Aviation, the US Federal Aviation Administration or the civil authority of an EASA member nation, OR Must have successfully completed the DND Aircraft Certification and Technical Airworthiness Clearance Course, OR Must have a combined five (5) years' experience in the last ten (10), in a minimum of four (4) of the following six (6) specialist areas:
a. Civil Aviation Regulations, Standards and Advisories;
b. Aircraft Type Certification Process;
c. Aeronautical Product Design Change Approval;
d. Continuing Airworthiness and Monitoring Systems;
e. Delegation of Authority; or
f. Hazard and Safety Assessment.

Table 2: Airworthiness Certification - Maintenance Programs, Group 1

Mandatory Requirements
1. Must have a certificate, diploma or degree from a recognized post-secondary institution* in a field of

<p>engineering, science or mathematics. OR Must have a technologist's diploma or qualification in aircraft maintenance from a recognized civil aviation training institution or the Department of National Defence. OR Must have a minimum of 15 years' experience in the performance or oversight of aircraft maintenance or aircraft technical support. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
2. Must have three (3) years' experience in the specialist field of aircraft maintenance program certification or audit, in a regulatory capacity, within the last eight (8) years.
3. Must have formal training and supported by a course report, certificate, or diploma in either:
a. Reliability Centered Maintenance (RCM) or Maintenance Steering Group (MSG) Three (3) Logic; or,
b. Failure Mode and Effects Analysis (FMEA).
4. Must have experience, demonstrated by examples, in at least four (4) of the maintenance program specialist activities listed below:
a. Participation in, or formal review of, Aircraft Maintenance Review Board procedures;
b. Development of Regulations and Standards relating to Instructions for Continued Airworthiness (ICAs);
c. Review and analysis leading to airworthiness approval of Airworthiness Limitations (AWLs) specifically:
i. Life limited components,
ii. Certification Maintenance requirements; and
iii. Structural integrity/damage tolerance inspections.
d. Review and analysis leading to airworthiness acceptance of ICAs specifically:
i. Maintenance Schedules; and
ii. Maintenance Instructions.
e. Review and analysis of documentation leading to Findings of Compliance with respect to the Certification of Aircraft Maintenance Programs;
f. Review and analysis of Maintenance Program Documentation based on Industry Accepted Standards such as but not limited to:
i. ATA 2200 (Air Transport Association of America Standards);
ii. SAE ARP 4761 (Safety Assessment Process on Civil Airborne Systems and Equipment); or
iii. SAE ARP 4754 (Certification Considerations for Highly Complex Aircraft Systems).
g. Review and analysis of technical information leading to the airworthiness approval of Aircraft Master Minimum Equipment Lists; or
h. Participation as a member of a regulatory audit team supporting the formal approval of a Maintenance Organization.

Table 3: Airworthiness Regulatory Development, Group 1

Mandatory Requirements
1. Must have a certificate, diploma, or undergraduate degree from a recognized post-secondary institution*. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of ten (10) years of experience within the last fifteen (15) years, in the field of aircraft operations, aviation safety or airworthiness regulation.
3. Must have a minimum of five (5) years' experience within the last fifteen (15) years at a middle or senior management level either:
a. Within a recognized airworthiness regulatory organization (e.g.: Transport Canada Civil Aviation (TCCA), Federal Aviation Administration (FAA), etc.) and/or a NATO member nation's military airworthiness authority;

Mandatory Requirements	
b.	Within a design or maintenance organization recognized by a national airworthiness regulatory authority; or
c.	Having been assigned airworthiness authority as a designated individual by a national airworthiness regulatory authority.
4.	Must have experience, demonstrated by examples, in one (1) or more of the four (4) following activities:
a.	The certification of aeronautical products by a national aviation regulatory authority;
b.	The airworthiness accreditation of engineering, design approval or maintenance organizations or their equivalent (Airworthiness Engineering Organization, Design Approval Organization or Approved Maintenance Organization);
c.	The designation of engineers and design approval representatives (DEs and DARs); or,
d.	The development and management of airworthiness regulatory documentation (e.g.: Rules, Standards, Guidance Material, Policies, Advisories, etc.).

Table 4: Airworthiness Analyst - Accreditation and Audit, Group 1

Mandatory Requirements	
1.	Must have a certificate, diploma or degree from a recognized post-secondary institution* in a field of engineering, science or mathematics. OR Must have a technologist's diploma or qualification in aircraft maintenance from a recognized civil aviation training institution or the Department of National Defence. OR Must have a minimum of fifteen (15) years' experience in the performance or oversight of aircraft maintenance or aircraft technical support. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years' experience within the past fifteen (15) years:
a.	In the performance or oversight of aircraft maintenance; or
b.	In the performance or oversight of aircraft technical support.
3.	Provide documented proof of having successfully completed at least one of the following:
a.	The Air Maintenance Policy Level Two (2) exam (DND/CAF);
b.	The Transport Canada Aircraft Maintenance Engineer (TC AME) exam;
c.	An Aircraft Certification Course delivered by a national airworthiness authority; or
d.	The DND/CAF Senior Design Engineer or Technical Airworthiness Course
4.	Must have demonstrated experience in aircraft maintenance and technical support or airworthiness regulator support for four (4) out of the seven (7) areas listed below and provide a minimum of one (1) concrete example of work performed in each area.
a.	<u>Aircraft Record Management</u> . This can include, but is not limited to, work related to updating and reviewing of aircraft Log set for scheduling and meeting forecasted maintenance activities such as: aircraft inspection, tracking of flying hours and life component, the control of modification and special inspection and control of out-of-sequence inspection.
b.	<u>Authorization System Management</u> . This can include, but is not limited to, work related in administering, authorizing aircraft technicians or making authorization recommendations to a supervisor for competent individuals who have demonstrated the ability to perform the maintenance activities independently.
c.	<u>Development and Implementation of Quality System Procedures</u> . This can include, but is not limited to, writing, reviewing or approval of quality documentation used in aircraft maintenance or technical support organizations.

d. <u>Technical Writing</u> - This does not include the activity of reviewing or approving documentation; it must only include the actual authoring of work related to aircraft technical issues or aerospace organizational issues captured in: <ul style="list-style-type: none"> i. Audit observations or reports; ii. Technical Memorandums; iii. Technical Notes; iv. Technical Briefing Notes; v. Aircraft maintenance manuals; or, vi. Airworthiness Certification documentation.
e. <u>Airworthiness Process Manual Development</u> . This can only include work in developing airworthiness process manual content to achieve organizational approval from either a civil regulator or the Technical Airworthiness Authority for DND.
f. <u>Airworthiness Process Manual Assessment</u> . This can only include work reviewing airworthiness process manual content for compliance to either civil or DND regulatory standards.
g. <u>Airworthiness Audits Management</u> . This can only include work related in coordinating pre and post airworthiness audit activities, including but not limited to: <ul style="list-style-type: none"> i. Initiating pre-audit activities with applicable technical organization; ii. Assessing of corrective action plans; iii. Initiating follow up action; and iv. Managing all deliverables from organizations.

Table 5: Airworthiness Analyst - Technical Support, Group 1

Mandatory Requirements	
1.	Must have a certificate, diploma or degree from a recognized post-secondary institution* in a field of engineering, science or mathematics. OR Must have a technologist's diploma or qualification in aircraft maintenance from a recognized civil aviation training institution or the Department of National Defence. OR Must have been an Aerospace Engineering Officer (AERE) within DND/CAF. OR Must have a minimum of fifteen (15) years' experience in the performance or oversight of aircraft maintenance or aircraft technical support. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years' experience within the past fifteen (15) years in the field of aircraft engineering or maintenance, aircraft life cycle management, aviation safety, airworthiness risk management, Type Certificate Holder functions or airworthiness regulation.
3.	Must have demonstrated experience, supported by detailed examples, of work performed in aircraft technical support or airworthiness regulator support for a minimum of five (5) of the ten (10) areas listed below:
a.	<u>Maintenance Program Management</u> - This can only include work related to the development, review or approval of changes to aircraft inspection schedules and maintenance manuals.
b.	<u>Aircraft Parts Procurement and Management</u> - This can include, but is not limited to, work related to selecting appropriate vendors for aeronautical parts procurement and the activities related to updating the approved parts list for an aircraft type. This can also include work performed to identify alternate approved parts and the authorization of substitute parts for installation on an aircraft.
c.	<u>Design Change Management</u> - This can only include work related to the development, review or approval of aircraft design changes and management the configuration records associated with this activity.
d.	<u>Service Bulletin Implementation, Special Inspection or Engineering Action</u> - this can include, but is

	not limited to work related to the monitoring of other operator service information and technical bulletins, and the engineering review of this data for applicability to the aircraft type supported. It includes the work related to the development of directions to maintenance organizations to inspect aircraft for the purpose of gathering information to develop corrective action.
e.	<u>Development and Implementation of Quality System Procedures</u> - This must include writing, reviewing or approval of quality documentation used in an aircraft engineering or technical support organization.
f.	<u>Technical Writing</u> - This does not include the activity of reviewing or approving documentation; it must only include the actual authoring of work related to aircraft technical issues or aerospace organizational issues captured in: <ul style="list-style-type: none"> i. Audit observations or reports; ii. Technical Memorandums; iii. Technical Notes; vii. Technical Briefing Notes; iv. Aircraft maintenance manuals; v. Airworthiness Certification documentation; or, Airworthiness regulatory procedures.
g.	<u>Risk Management</u> – This includes the five basic elements of hazard identification, risk assessment, risk control plan, risk acceptance and risk tracking.
h.	<u>Airworthiness Monitoring</u> – This includes the monitoring and dispositioning of Airworthiness Directives, OEM Service Information, Flight Safety Occurrences and Aircraft Accident Reports, Reliability and Maintainability, Aircraft Usage and Condition Monitoring, and assessment of other operator's experience, airworthiness risk, and non-conforming parts.
i.	<u>Aircraft Record Management and Documentation Control</u> - this must include work performed in maintaining aircraft type records or configuration management records.
j.	<u>Project Management</u> - This includes actual work performed related to project planning, defining project tasks and schedule, project plan execution and project control.

Table 6: Airworthiness Analyst - Electronic Record Keeping Systems (ERKS), Group 1

Mandatory Requirements	
1.	Must have a certificate, diploma or degree from a recognized post-secondary institution* in a field of engineering, science or mathematics. OR Must have a technologist's diploma or qualification in aircraft maintenance from a recognized civil aviation training institution or the Department of National Defence. OR Must have a minimum of fifteen (15) years' experience in the performance or oversight of aircraft maintenance or aircraft technical support. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of five (5) years' experience within the past ten (10) years in one or more of the following areas:
	a. In the performance or oversight of aircraft maintenance;
	b. In the performance or oversight of aircraft technical support; or
	c. In the performance or oversight of ERKS activities.
3.	Must have demonstrated experience in aircraft maintenance or technical support or airworthiness regulator support for three (3) out of the five (5) areas listed below and provide a minimum of one (1) concrete example of work performed in each area.
	a. <u>ERKS Development Activities</u> . This can include, but is not limited to development of project plans, verification and validation of system functionality, parallel system operation, management plans, user guides, training plan, and transition plan.
	b. <u>ERKS Management and Operation</u> . This can include, but is not limited to, work related to updating

and reviewing of ERKS during in-service operations for scheduling and meeting forecasted maintenance activities such as: aircraft inspection, tracking of flying hours and life component, the control of modification and special inspection and control of out-of-sequence inspection.
c. <u>(ERKS) Certification.</u> This can include work related to reviewing or approving activities such as: <ul style="list-style-type: none"> i. acceptance guidance to stakeholders on planning ERKS verification and validation; ii. Project Plan approval; iii. Parallel System operations planning and acceptance; and iv. Managing all ERKS deliverables from organizations.
d. <u>ERKS In-Service Monitoring.</u> This includes, but is not limited to, such activities as: <ul style="list-style-type: none"> i. Performing Maintenance Plan Audits; and ii. Performing Configuration Management Audits.
e. <u>Airworthiness Audits Management.</u> This can only include work related in coordinating pre and post airworthiness audit activities, including but not limited to: <ul style="list-style-type: none"> i. Initiating pre-audit activities with applicable technical organization; ii. Assessing of corrective action plans; iii. Initiating follow up action; and iv. Managing all deliverables from organizations.

Table 7: Structures, Group 2

Mandatory Requirements
1. Must have an undergraduate or master's degree from a recognized post-secondary institution * in Aeronautical or Mechanical Engineering. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of five (5) years' experience within the past eight (8) years, related to aircraft structural engineering.
3. Must have experience in at least four (4) of the following areas: <ul style="list-style-type: none"> a. Aircraft structure design; b. Loads development; c. Stress analysis (static, fatigue and damage tolerance analysis); d. Fatigue testing; e. Structural dynamics; f. Aircraft structural integrity management; g. Full scale testing and teardown; h. Design, evaluation and exploitation of the Finite Element Model (FEM); i. Manufacture or maintenance of aircraft structural systems; or j. Aircraft structural repair design.

Table 8: Structures - Regulatory, Group 2

Mandatory Requirements
1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical or Mechanical Engineering. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of ten (10) years' experience within the past thirteen (13) years, related to aircraft structural engineering and/or performing certification work for aircraft structural designs.
3. Must have a minimum of two (2) years' experience within the last seven (7) years in aircraft structural systems airworthiness certification including: review of design specifications, work with a Basis of Certification, work with a certification plan, work with compliance programs and related compliance documentation.

<ul style="list-style-type: none"> a. Must have experience in at least six (6) of the following: b. Aircraft structure design; c. Loads development; d. Stress analysis (static, fatigue and damage tolerance analysis); e. Fatigue testing; f. Structural dynamics; g. Aircraft structural integrity management; h. Full scale testing and teardown; i. Design, evaluation and exploitation of the Finite Element Model (FEM); j. Aircraft structural repair design; k. Manufacture or maintenance of aircraft structural systems; or l. Certification of aircraft structure.
--

Table 9: Mechanical Systems, Group 2

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical or Mechanical Engineering. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in aircraft mechanical system. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must have specialist training and qualifications in two (2) or more of the following aircraft systems:</p> <ul style="list-style-type: none"> a. Fuel; b. Hydraulic; c. Gear-Trains; d. Engine Mounting; e. Aircraft Interiors; f. Undercarriage; g. Secondary Power; or, h. Air Management Systems.
<p>3. Must have a minimum of five (5) years' experience within the past eight (8) years related to aircraft mechanical system engineering in three (3) or more of the following speciality areas:</p> <ul style="list-style-type: none"> a. Fuel systems including air to air refuelling, internal and external tanks, refuel etc.; b. Secondary power systems and air management systems; c. Helicopter main gearbox and transmission systems; d. Mechanical systems (including engine mounting and support structure, oil systems, nacelles, ducting, etc.); e. Hydraulic systems; f. Landing gear including wheels, brakes, actuation etc.; g. Aircraft interiors; or h. Ground support systems (Aircraft Maintenance Support Equipment).

Table 10: Mechanical Systems - Regulatory, Group 2

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical or Mechanical Engineering. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>

2.	Must have specialist training and qualifications in aircraft systems for three (3) or more of the following systems: a. Fuel; b. Hydraulic; c. Gear-Trains; d. Engine Mounting; e. Aircraft Interiors; f. Undercarriage; g. Secondary Power; or, h. Air Management Systems.
3.	Must have a minimum of ten (10) years' experience, within the past fifteen (15) years, related to aircraft mechanical system engineering, with four (4) or more of the following aircraft mechanical systems: a. Fuel systems including air to air refuelling, internal and external tanks, refuel etc.; b. Secondary power systems and air management systems; c. Helicopter main gearbox and transmission systems; d. Mechanical systems (including engine mounting and support structure, oil systems, nacelles, ducting, etc.); e. Hydraulic systems; f. Landing gear including wheels, brakes, actuation etc.; g. Aircraft interiors; or h. Ground support systems (AMSE).
4.	Must have a minimum of three (3) years' experience within the last seven (7) years in aircraft mechanical systems airworthiness certification including review of design specifications, work with a Basis of Certification, work with a certification plan, work with compliance programs and related compliance documentation.

Table 11: Electrical Systems, Group 2

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree in a science or engineering discipline from a recognized post-secondary institution*, and specialized education in aircraft electrical systems. OR Must have an Aviation Electrical Technologist College diploma education with a minimum of fifteen (15) years' experience, including three (3) years within the past five (5) years, related to the design and/or technical support of aircraft electrical systems. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of five (5) years' of demonstrated work experience, within the past eight (8) years, related to aircraft electrical systems, including experience with Electrical Power Generation systems and Electrical Wiring Interconnection Systems (EWIS) in military and/or civilian type aircraft.
3.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in each of the following three (3) areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
	a. Aircraft electrical systems and equipment;
	b. The design, manufacture and maintenance of aircraft electrical systems; and

- c. The theories and principles of aircraft electrical systems operation in order to assess and analyze defects/deficiencies and make technical recommendations to effect solutions to the defect and deficiency.

Table 12: Electrical Systems- Regulatory, Group 2

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have an engineering or master's degree from a recognized post-secondary institution* and a minimum of five (5) years' demonstrated work experience as an aircraft electrical systems specialist. OR Must have an Aviation Electrical Technologist College diploma or equivalent education with a minimum of twenty (20) years' experience, including five (5) years within the past eight (8) years, related to the design and/or engineering support of aircraft electrical systems. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of eight (8) years' experience, within the past eleven (11) years, related to aircraft electrical systems engineering, including experience with Electrical Power Generation systems and Electrical Wiring Interconnection Systems (EWIS) in military and/or civilian type aircraft.
3.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in each of the following areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
	a. Aircraft electrical systems and equipment;
	b. The design, manufacture and maintenance of aircraft electrical systems; And
	c. The theories and principles of aircraft electrical systems operation in order to assess/analyze defects/deficiencies and make technical recommendations to effect solutions to the defect/deficiency.
4.	Must have a minimum of three (3) years' experience within the last eight (8) years in aircraft electrical systems airworthiness certification, including review of design specifications, work with Basis of Certification, work with a certification plan, work with compliance programs and related compliance documentation.

Table 13: Propulsion, Group 2

Mandatory Requirements	
1.	Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical or Mechanical Engineering. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in the area of propulsion. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have completed engineering courses in two (2) or more of the following aircraft specialty areas: a. Aero Gas Turbine Engine (GTE) design and performance; b. Aircraft propulsion systems integration; c. Aero GTE Prognostics and Health Management (PHM); d. Aero GTE Health and Usage Monitoring Systems (HUMS); or e. Fuels and Lubricants.

3.	Must have a minimum of five (5) years' experience within the past twelve (12) years, related to the design and/or engineering support of aircraft turbine engines and engine installations, including experience with two (2) or more of the following related systems: <ul style="list-style-type: none"> a. Turbomachinery component design, specifically to include lifing methodologies and technical considerations; b. Development of engine specifications; c. Aero GTE Prognostic and Health Management (PHM) methodologies; d. GTE Health and Usage Monitoring Systems; e. Aircraft fuel systems; f. Auxiliary power units; g. Engine accessory systems (e.g. fire-suppression, anti-icing); h. Airframe integration; i. Aeropropulsion control systems; j. Propeller design and integration; or k. Helicopter main gearbox/transmission systems.
4.	Must provide at least one (1) example of work performed within the past eight (8) years that clearly demonstrates knowledge* in: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
	a. Aircraft turbine engine design principles, practices and current technology including engine installation, operation and maintenance; or
	b. Ground and flight test principles and practices as applied to aircraft engines.

Table 14: Propulsion - Regulatory, Group 2

Mandatory Requirements	
1.	Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical or Mechanical Engineering. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education as well as five (5) years of experience in the area of propulsion. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have completed engineering courses in three (3) or more of the following aircraft specialty areas: <ul style="list-style-type: none"> a. Aero Gas Turbine Engine (GTE) design and performance; b. Aircraft propulsion systems integration; c. Aero GTE Prognostics and Health Management (PHM); d. Aero GTE Health and Usage Monitoring Systems (HUMS); e. Aero Propulsion Airworthiness Certification; or f. Fuels and Lubricants.
3.	Must have completed engineering courses in three (3) or more of the following aircraft specialty areas: <ul style="list-style-type: none"> a. Turbomachinery component design, specifically to include lifing methodologies and technical considerations; b. Development of engine specifications; c. Aero GTE Prognostic and Health Management (PHM) methodologies; d. GTE Health and Usage Monitoring Systems; e. Aircraft fuel systems;

<ul style="list-style-type: none"> f. Auxiliary power units; g. Engine accessory systems (e.g. fire-suppression, anti-icing); h. Airframe integration; i. Aeropropulsion control systems; j. Propeller design and integration; k. Helicopter main gearbox/transmission systems; or l. Engine certification testing.
4. Must have a minimum of ten (10) years' experience, including at least (5) years within the past eight (8) years, related to the design and/or engineering support of aircraft turbine engines, including engine installations for military or civilian turbo jet or turbo prop powered type aircraft or a mix of both.
5. Must have four (4) years' experience within the last seven (7) years in propulsion systems airworthiness certification against recognized civil or military standards, including review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.
6. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in each of the following areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Aircraft turbine engine design principles, practices and current technology including engine installation, operation and maintenance;
b. Ground and flight test principles and practices as applied to aircraft engines; And
c. The application of airworthiness standards to propulsion system certification at the engine and aircraft levels.

Table 15: Flight Sciences, Group 2

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* with specialization in Aeronautical Engineering, or other engineering specialty relevant to an aerospace occupation. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in the areas of aircraft aerodynamics and/or flight dynamics. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must provide course certificates, diplomas or equivalent evidence of successful completion of training and qualifications; or performed a flight test in at least two (2) of the areas of flight sciences:</p> <ul style="list-style-type: none"> a. Aerodynamics; b. Aircraft performance; c. Flight dynamics and control; d. Aircraft structural dynamics and/or aero-elasticity; e. Aeromechanics; f. Aircraft flight loads; g. Aircraft icing; or h. Stores separation.
<p>3. Must have a minimum of five (5) years' experience within the past eight (8) years in either a military, government or commercial aerospace engineering organization performing engineering for fixed-wing and/or rotary-wing aircraft in at least two (2) of the areas of flight sciences:</p> <ul style="list-style-type: none"> a. Aerodynamics;

<ul style="list-style-type: none"> b. Aircraft performance; c. Flight dynamics and control; d. Aircraft structural dynamics and/or aero-elasticity; e. Aeromechanics; f. Aircraft flight loads; g. Aircraft icing; h. Stores separation and/or i. Flight test in any of the preceding.
Note: Completed postgraduate training in flight sciences counts for one (1) year of experience.
<p>4. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in the following three (3) areas:</p> <p><i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i></p>
a. Engineering principles, analytical techniques, practices and current technology in flight sciences as they apply to engineering activities such as design, modification, testing, operation and/or airworthiness certification of aircraft;
b. Airworthiness concepts and aviation regulations, primarily related to flight sciences aspects of aircraft; and
c. General aircrew practices and procedures for operation of aircraft.

Table 16: Flight Sciences - Regulatory, Group 2

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in Aeronautical Engineering.</p> <p>OR</p> <p>Must have an undergraduate or master's degree from a recognized post-secondary institution* in engineering or science and ten (10) years as a specialist in Flight Sciences.</p> <p><i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must provide details of specialist training and qualifications in at least three (3) of the areas of flight sciences:</p> <ul style="list-style-type: none"> a. Aerodynamics; b. Aircraft performance; c. Flight dynamics and control; d. Aircraft structural dynamics and/or aero-elasticity; e. Aircraft flight loads; f. Aircraft icing; g. Stores separation; or h. Flight test in any of the preceding.
<p>3. Must have a minimum of ten (10) years' experience in the aeronautical field, including at least eight (8) years with the aerodynamics or flight dynamics design and/or engineering support. Credit will only be given for experience in the following areas:</p> <ul style="list-style-type: none"> a. Providing aerodynamics design and engineering support for fixed and/or rotary-wing aircraft; b. Provide engineering support/airworthiness engineering in the fields of aerodynamics, flight dynamics, aircraft performance, aircraft icing, aero-elasticity for fixed and/or rotary-wing aircraft; c. Performing flight and structural stores clearances; and/or d. Flight test piloting; or e. Flight test engineering experience.
<p>4. Must have one (1) year experience within the last seven (7) years in performing aerodynamic and/or</p>

Flight Sciences related engineering support to airworthiness certification activities using recognized civil or military standards, including review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.
5. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in each of the following eight (8) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Aerospace engineering and flight test principles and practices, regulations and standards as applied to fixed and rotary wing aircraft.
b. Aerodynamics, including experimental methods and ground testing technology, aircraft flight mechanics, electro-mechanical engineering, systems used for data acquisition (computers, instrumentation), data acquisition amend processing, and aeronautical, electrical, electronic, mechanical instruments and equipment.
c. Development and use of technologies in advanced aerodynamics for fixed wing and rotary wing aircraft, computer analysis techniques, computational aerodynamics and the impact of digital flight controls on flight dynamics.
d. Air operations, aircraft flight dynamics, aero flight elasticity, store separation, ballistics and aircraft weapons.
e. The functions and operational techniques of math simulation models used to analyze ground and aircraft flight test data to provide aircraft weapons clearances in aero-elasticity, stores, structural dynamics and ballistics
f. Aerospace engineering and flight test principles, practices regulations and current technology as applied to fixed and rotary wing.
g. Regulatory concepts, principles, and standards used to achieve airworthiness certification.
h. Systems safety assessment and functional hazard analysis.

Table 17: Aviation Life Support Equipment (ALSE), Group 2

Individuals Name:
Mandatory Requirements
1. Must have a degree from a recognized post-secondary institution* in a field of engineering, science or mathematics. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) classification within the CAF. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of three (3) years of demonstrated experience with ALSE within the last ten (10) years and provide details to include a minimum of one (1) example of work performed or formal education that demonstrates experience and knowledge* in a minimum of seven (7) of the following subject areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Aviation oxygen systems (e.g. Gaseous Oxygen Cylinders; Oxygen Regulators; Oxygen System Plumbing/Test equipment; Liquid Oxygen (LOX) Converter; Emergency Oxygen Systems (portable and hard mounted); Oxygen Masks; Chemical Oxygen);
b. Cryogenic Equipment (Oxygen Servicing Unit, LOX Servicing Trailers, LOX sampler, purging unit, gaseous oxygen trailers, cleaning cart, servicing clothing and facilities);

<ul style="list-style-type: none"> c. Ejection Seat, Sequencing System and Rocket (aircraft pyrotechnics devices); d. Human rated parachutes, including Search and Rescue (CSAR-7), troop, ejection seat and Aircrew Emergency Parachutes Systems; e. Restraint harnesses (e.g. crew harness, hoisting, ejection seat); f. Aircrew & Passenger Life Preservers/Survival Vests (also Slim Line Back Pack) and associated Automatic Inflation Device (AID); g. Aircrew clothing, including immersion garments and cooling garments; h. Aircrew helmets, including night vision goggle integration and laser visors; i. Anti-G garments and related human factors considerations; j. Life rafts and associated equipment (including AID); k. Emergency Breathing System (EBS); l. First Aid Kits, Survival Kits & containers; m. Hazardous Cargo Kit; n. Nuclear Biological Chemical (NBC) Respirator and/or Aircrew Chemical Defence Ventilator System (ACDVS); o. NBC Equipment, Liquid & Vapour Protection Garment & Chemical Defence Individual Protection Equipment; p. SAR equipment, including litters (for hoisting), air-droppable kits, equipment delivery systems (parachute, hoist-lowered), descent devices (e.g. Anthron); q. Cargo Extraction Parachute Systems (cargo, drift, extraction system); r. Aerial Delivery Parachutes and Equipment (pallets, platforms, nets, containers, slings; safety restraints; rigging procedures); or s. AMSE (Electrical, Hydraulic, Oxygen/Nitrogen, Air Start Cart).
1. Must have a minimum of one (1) example of work performed within the past ten (10) years for a minimum of two (2) of the following three (3) areas:
<ul style="list-style-type: none"> a. Design Change Management - This can only include work related to the development, review or approval of aircraft design changes and management the configuration records associated with this activity;
<ul style="list-style-type: none"> b. Development and Implementation of Quality System Procedures. - This must include writing, reviewing or approval of quality documentation used in the engineering or technical support organization; and/or
<ul style="list-style-type: none"> c. Project Management - This includes actual work performed related to project planning, defining project tasks and schedule, project plan execution and project control.

Table 18: Aircraft Material Processes and Environmental Engineering, Group 2

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in materials, industrial, chemical, or other related program.</p> <p>OR</p> <p>Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) classification within the CAF</p> <p><i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must have specialist training and qualifications (course certificates, diplomas or equivalent evidence) in at least three (3) of the following areas:</p> <ul style="list-style-type: none"> a. Aerospace paint and painting process; b. Aerospace corrosion inhibiting chemical, coatings and associated processes; c. Aerospace Adhesives and sealants; d. Aerospace Composite Manufacturing processes; e. Aerospace Metallic Fabrication process; f. Aerospace Metallic treatments (Heat/Chemical);

g. Quality Assurance testing of manufacturing processes, adhesives and coating systems;
h. Environment Control systems for Aircraft;
i. Aerospace Lubricants; or
j. Aerospace Fluids (Hydraulics).
3. Must have a minimum of ten (10) years of experience within the last twelve (12) years in at least four (4) of the following areas:
a. Aerospace paint and painting process;
b. Aerospace corrosion inhibiting chemical, coatings and associated processes;
c. Aerospace Adhesives and sealants;
d. Aerospace Composite Manufacturing processes;
e. Aerospace Metallic Fabrication process;
f. Aerospace Metallic treatments (Heat/Chemical);
g. Quality Assurance testing of manufacturing processes, adhesives and coating systems;
h. Environment Control systems for Aircraft;
i. Aerospace Lubricants; or
j. Aerospace Fluids (Hydraulics).
4. Must have experience in researching, developing, writing and editing manuals, technical reports, and technical drawings.

Table 19: Avionics - Group 3

Mandatory Requirements
1. Must have an undergraduate or master's degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in engineering or science, and five (5) years' experience as an avionics specialist. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering (CELE-Air) trade within the CAF and five (5) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of five (5) years' experience within the past ten (10) years, related to aircraft avionics, including experience with avionics upgrades and the integration of avionics systems in military and/or civilian type aircraft.
3. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in three (3) of the following five (5) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Engineering principles, practices and current technology in the field of avionics systems and avionics system integration as applied to three (3) or more of the following systems: aircraft navigation systems, aircraft communication systems, aircraft digital flight control systems, aircraft flight management systems, aircraft electrical systems, aircraft control and display systems.
b. Avionics system integration standards, processes and procedures.
c. Civil and/or military avionics bus protocols and their typical implementation.
d. Avionics systems design and functioning applicable to communications, navigation, flight management and avionics control/display systems.
e. Avionics ground and flight test principles and practices as applied to fixed and rotary wing aircraft

Table 20: Avionics - Regulatory, Group 3

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in engineering or science, and five (5) years' experience as an avionics specialist. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering-Air (CELE-Air) trade within the CAF and ten (10) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years' experience within the past fifteen (15) years, related to aircraft avionics engineering, including experience with avionics upgrades and the integration of avionics systems in military and/or civilian type aircraft, or the certification of avionics systems.
3.	Must have a minimum of three (3) years of practical experience within the last seven (7) years in avionics systems airworthiness certification including major design changes or the certification of new aircraft, including review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation. Experience must include work related to aircraft flight critical avionics systems.
4.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in four (4) of the following eight (8) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a.	Engineering principles, practices and current technology in the field of avionics systems and avionics system integration as applied to three (3) or more of the following systems: aircraft navigation systems, aircraft communication systems, aircraft digital flight control systems, aircraft flight management systems, aircraft electrical systems, aircraft control and display systems.
b.	Avionics system integration standards, processes and procedures.
c.	Civil and/or military avionics bus protocols and their typical implementation.
d.	Avionics systems design and functioning applicable to communications, navigation, flight management and avionics control/display systems.
e.	Principles, practices and current technology in the field of aircraft systems safety engineering and the application of 1309 Design Analysis, SAE ARP 4761 and SAE ARP 4754 to aircraft system certification.
f.	Avionics ground and flight test principles and practices as applied to fixed and rotary wing aircraft
g.	The application of airworthiness certification principles applicable to aircraft systems.
h.	Concepts, principles and practices applicable to the design, development and certification of aircraft software.

Table 21: Avionics Systems Engineering, Group 3

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a

<p>science or engineering discipline, and specialized education in aircraft avionics. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering-Air (CELE-Air) trade within the CAF and five (5) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must have specialist training and qualifications focusing on aircraft avionics systems, and as a minimum one of the following real-time avionics domains: a. Avionics Military or Civilian Mission Systems such as Sensors Systems or on-board Military or Civil specialized communication systems; or b. Avionics "front-end" systems such as CNS/ATM (Communications Navigation and Surveillance systems for Air Traffic Management) systems or Flight Management Systems.</p>
<p>3. Must provide details, including a minimum of one (1) example, of work performed that clearly demonstrates experience in two (2) of the following three (3) areas:</p>
<p>a. A minimum of five (5) years' experience, including three (3) years in avionics systems engineering within the past five (5) years; b. Have demonstrated experience with avionics upgrades or acquisition, and integration of avionics and/or mission systems in military and/or civilian type aircraft; or c. Have experience in avionics system engineering processes including requirements definition, or engineering definition, or design, or test and evaluation, or implementation avionics and/or mission systems.</p>
<p>4. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in three (3) of the following six (6) areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i></p>
<p>a. Engineering principles, practices and current technology in the field of avionics systems and avionics system integration as applied to three (3) or more of the following systems: aircraft navigation systems, aircraft communication systems, aircraft digital flight control systems, aircraft flight management systems, aircraft electrical systems, aircraft control and display systems, aircraft Radar Systems, CNS/ATM systems, or avionics mission systems.</p>
<p>b. Avionics system engineering standards, processes and procedures.</p>
<p>c. Civil and/or military avionics bus protocols and their typical implementation.</p>
<p>d. Integration of real-time embedded software and hardware to create an integrated platform suite.</p>
<p>e. Avionics systems evaluation and testing principles and practices.</p>
<p>f. Avionics ground and flight test principles and practices as applied to fixed and/or rotary wing aircraft.</p>

Table 22: Avionics Software, Group 3

Mandatory Requirements
<p>1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in computer or software engineering. OR Must have an engineering or science degree from a recognized post-secondary institution* in a related discipline and a minimum of four (4) years' experience as an aviation software specialist. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE), or Communications and Electronics Engineering-Air (CELE-Air) trade within the CAF and two (2) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>

2.	Must have specialist training and/or qualifications in airborne software engineering and/or software airworthiness certification, including, but not limited to RTCA/DO-178 and real-time embedded software engineering.
3.	Must have specialist training and qualifications in the practical use of: <ul style="list-style-type: none"> a. Software languages such as Assembler, ADA, C, C++; b. Software integrated development environments (e.g. MS Dev Studio, Eclipse) or in modelling tools (e.g. IBM Rational Rose, Artisan Studio, PTC Integrity Modeller); and c. Software metrics / analysis tools (such as LDRA Quality Review)
4.	Must have a minimum of seven (7) years' experience, within the past ten (10) years in airborne software development including: <ul style="list-style-type: none"> a. Experience with the application of RTCA/DO-178; b. Experience with avionics upgrades and the integration of avionics systems in military and/or civil aircraft; and c. Experience with avionics software upgrades and the integration of software into avionics systems in military and/or civil aircraft.
5.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates understanding and/or knowledge* in eight (8) of the following eleven (11) areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a.	Concepts, principles and practices applicable to the design, development and qualification of aircraft software.
b.	Real-time operating systems, tasks scheduling, and typical services required for airborne systems implementation.
c.	Common avionics bus protocols and their typical implementation components.
d.	Modern software tools, metrics, and development environment used in embedded software implementation.
e.	Software evaluation and testing principles and practices.
f.	Software capability maturity models and their application to software development, qualification and certification or similar models.
g.	Principles, practices and current technology in the field of aircraft systems safety engineering.
h.	The application of software configuration management, software quality assurance and software verification and validation principles and practices.
i.	Engineering principles, practices and current technology in the field of avionics systems and avionics system integration with a focus on software.
j.	Avionics ground and flight test principles and practices as applied to fixed and rotary wing aircraft.
k.	Avionics system design and functioning applicable to communications, navigation, flight management and avionics control/display systems.

Table 23: Avionics Software – Regulatory, Group 3

Individuals Name:
Mandatory Requirements
1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in computer or software engineering. OR Must have an engineering or science degree from a recognized post-secondary institution* in a related discipline and a minimum of four (4) years' experience as an aviation software specialist. OR

Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE), or Communications and Electronics Engineering-Air (CELE-Air) trade within the CAF and two (2) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>	
2.	Must have specialist training and qualifications in airborne software engineering and software airworthiness certification, including but not limited to RTCA/DO-178 and real-time embedded software engineering.
3.	Must have a minimum of eight (8) years' experience within the past eleven (11) years, in airborne software engineering and/or airworthiness certification, including: <ul style="list-style-type: none"> a. Experience with the application of RTCA/DO-178, b. Experience with avionics software upgrades, or c. The integration of avionics systems in military and/or civil type aircraft.
4.	Must have three (3) years' experience within the last seven (7) years in performing aircraft software airworthiness certification activities using recognized civil or military software development and certification standards, including the review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.
5.	Must have two (2) years of experience at participating in Federal Aviation Administration (FAA), RTCA, or other regulatory guidance development.
6.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in eleven (11) of the following fourteen (14) areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
	a. Concepts, principles and practices applicable to the design, development and certification of aircraft software.
	b. Real-time operating systems, tasks scheduling, and typical services required for airborne systems implementation.
	c. Common avionics bus protocols and their typical implementation components.
	d. Modern software tools, metrics, and development environment used in embedded software implementation.
	e. Software evaluation and testing principles and practices.
	f. Software capability maturity models and their application to software development and certification or similar models.
	g. The concepts, principles and application of RTCA/DO-178B.
	h. Civil or military software related guidance material and processes.
	i. Principles, practices and current technology in the field of aircraft systems safety engineering and the application of FAR 25.1309 Design Analysis, SAE ARP 4761 and SAE ARP 4754 to aircraft system certification.
	j. The application of software configuration management, software quality assurance and software verification and validation principles and practices.
	k. The application of airworthiness certification requirements applicable to aircraft systems and software.
	l. Engineering principles, practices and current technology in the field of avionics systems and avionics system integration.
	m. Avionics systems software integration standards, processes and procedures.
	n. Avionics systems design and functioning applicable to communications, navigation, flight management and avionics control/display systems.

Table 24: Electromagnetic Environmental Effects (E3), Group 3

--

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline and three (3) years' experience as specialist in E3. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or within the CAF and two (2) years' experience in E3. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have specialist training and qualifications in E3.
3.	Must have a minimum of five (5) years' experience within the past seven (7) years, performing E3 analysis and/or engineering support of aircraft avionics installations.
4.	Must provide details of work performed or formal education that clearly demonstrates knowledge* in two of the following three (3) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a.	Electrical, electronic and electromagnetic theory with respect to the electromagnetic environmental effects on aircraft; applied mathematics, and of the basic elements of physics in the field of electromagnetic environmental effects on military aircraft.
b.	The field of aircraft avionics, avionics installations and aircraft antennas and air operations in which the aircraft avionics systems are required to operate.
c.	Specialist software programs used to predict aircraft electromagnetic interference and aircraft antenna location.

Table 25: Electromagnetic Environmental Effects (E3) - Regulatory, Group 3

Mandatory Requirements	
1.	Must have an undergraduate or master's degree in electrical or electronic engineering from a recognized post-secondary institution*. OR Must have an undergraduate or master's degree from a recognized post-secondary institution* in a science or engineering discipline and five (5) years' experience as specialist in E3. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) and four (4) years' experience in E3. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have specialist training and qualifications in E3.
3.	Must have a minimum of ten (10) years' experience within the past thirteen (13) years, performing E3 analysis and/or engineering support of aircraft avionics installations.
4.	Must have two (2) years' experience within the last seven (7) years in performing E3 engineering support to airworthiness certification activities using recognized civil or military standards, including review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.
5.	Must provide details of work performed or formal education that clearly demonstrates knowledge* in the following four (4) areas: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline</i>

<i>or sphere of activities.</i>
a. Electrical, electronic and electromagnetic theory with respect to the electromagnetic environmental effects on aircraft; applied mathematics; and basic elements of physics in the field of electromagnetic environmental effects on military aircraft.
b. The field of aircraft avionics, avionics installations and aircraft antennas and air operations in which the aircraft avionics systems are required to operate.
c. Aircraft certification and airworthiness criteria and test methods required to certify civil and military aircraft as safe for flight.
d. Specialist software programs used to predict aircraft electromagnetic interference and aircraft antenna location.

Table 26: Aircraft Cyber Security, Group 3

Mandatory Requirements
1. Must have an undergraduate degree in computer engineering, electrical engineering, communications engineering, systems and computer engineering or electronics engineering from a recognized post-secondary institution*. OR Must have an undergraduate degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in computer science, systems or avionics. <i>*Please see note in appendix 1 to attachment 2 to part 4</i>
2. Must have a minimum of six (6) years' work experience in aeronautical computer and network security or aircraft system safety. <i>Note: Postgraduate training in field of aeronautical computer, network security or aircraft system safety counts as three (3) years' work experience.</i>
3. Must have a minimum of two (2) years' work experience with avionics upgrades and integration of avionics or mission systems in military and/or civilian type aircraft.
4. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in security or safety risk management and assessment. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>

Table 27: Aircraft Cyber Vulnerability Assessment, Group 3

Individuals Name:
Mandatory Requirements
1. Must have a degree in computer engineering, electrical engineering, communications engineering, systems and computer engineering or electronics engineering from a recognized post-secondary institution*. OR Must have a degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in computer science, systems or avionics. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have a minimum of six (6) years' work experience in cyber vulnerability assessment; <i>Note: Postgraduate training in field of cyber vulnerability assessment counts as three (3) years' experience.</i>
3. Must have a minimum of two (2) years' work experience with Operational Technology (OT), such as avionics upgrades and integration of avionics or mission systems in military and/or civilian type platforms.

- | |
|---|
| 4. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in cyber vulnerability assessment for OT.
<i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i> |
|---|

Table 28: Aircraft Communication Security, Group 3

Mandatory Requirements
1. Must have a degree in computer engineering, electrical engineering, communications engineering, systems and computer engineering or electronics engineering from a recognized post-secondary institution*. OR Must have a degree from a recognized post-secondary institution* in a science or engineering discipline, and specialized education in computer science, systems or avionics. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have training in communication security.
3. Must have a minimum of five (5) years' work experience in communication security <i>Note: Postgraduate training in field of employment can count for three (3) years' experience.</i>
4. Must have experience with avionics upgrades and integration of avionics and/or mission systems in military and/or civilian type aircraft.
5. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in security risk management and assessment. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>

Table 29: Electronic Warfare, Group 3

Mandatory Requirements
1. Must have a degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have a degree in a science or engineering discipline, and specialized education in Electronic Warfare (EW) from a recognized post-secondary institution*. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering (CELE) trade within the CAF and two (2) years' experience related to Electronic Warfare. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must provide details of training in at least one (1) of the following EW domains: a. Radio Frequency Warfare; b. EO/IR Warfare; c. Electronic Support Measures; or d. Combat Radar.
3. Must have a minimum of five (5) years in EW System Acquisition, EW System Performance Assessment and/or reprogramming and/or Combat Radar Performance Assessment. <i>Note: Postgraduate training in field of employment can count for three (3) years of experience.</i>

- | |
|--|
| 4. Must have experience with avionics upgrades and integration of avionics and/or mission systems in military and/or civilian type aircraft. |
|--|

Table 30: C4ISR, Group 3

Mandatory Requirements	
1.	Must have a degree in electrical and/or electronic engineering from a recognized post-secondary institution* OR Must have a degree from a recognized post-secondary institution* in a science or engineering discipline, and at least six (6) months, full-time specialized education in aviation systems such as communications or sensors. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering (CELE) trade within the CAF and ten (10) years' experience in the C4ISR field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years' experience within the last twenty (20) years in the aerospace domain, in defense aerospace equipment programs related to aviation communications. This can include experience related to communication systems acquisition, upgrade, engineering support, or equipment life cycle management.
3.	Must have a minimum of two (2) years of work experience within the last ten (10) years in providing strategic advice directly to the executive level in a Federal Government department or agency, or in industry.
4.	Must have a minimum of one (1) year of working experience within the last ten (10) years developing strategic or capability development assessment frameworks, documenting into an Architectural Framework such as DND Architectural Framework (DNDAF) or the US Department of Defense Architectural Framework (DoDAF).
5.	Must have a minimum of two (2) years of working experience in the field of Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) within the last five (5) years.
6.	Must have a minimum of two (2) years of working experience within the last fifteen (15) years in Gap Analysis or Gap Assessments of Capability Requirements in either the Federal Government or industry domains.

Table 31: Strategic Advisor, Group 4

Mandatory Requirements	
1.	Must have a certificate, diploma, or degree from a recognized post-secondary institution*. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years of combined experience working in aerospace engineering life cycle management and/or aeronautical product acquisition project management and/or the aviation regulatory domain.
3.	Must have a minimum of ten (10) years of combined experience working at the management or executive level of a military air force, a national civil aviation regulator, a public aerospace research establishment, and/or a commercial aviation corporation.
4.	Must have five (5) years' experience in the last ten (10) years, developing, advising on, or

Mandatory Requirements	
	implementing corporate level strategic initiatives, policies and procedures.
5.	Demonstrate, through provision of a detailed example, direct experience in at least one of the following areas:
a.	Developing, implementing, managing, and evaluating long-term strategic initiatives for a large organization;
b.	Reviewing and proposing amendments to legislation, guidelines concerning corporate level governance, large scale performance reporting or strategic risk management;
c.	Providing guidance on the development and preparation of Results-based Management and Accountability Framework (RMAF), Risk-Based Audit Framework (RBAF), Risk Based Assurance (RBA), Departmental Performance Reports (DPP) or Reports on Plans and Priorities (RPP); or
d.	Reviewing and providing advice regarding application of government policies, federal or provincial regulatory guidelines and/or public agency direction.

Table 32: Program Management, Group 4

Mandatory Requirements	
1.	Must have a certificate, diploma, or degree from a recognized post-secondary institution*. OR Must have a valid Project Management Institute (PMI) Project Management Professional (PMP) certification. Certain certificate is valid only for 5 years, others only 3 - see website: https://www.pmimontreal.org/en/certifications . OR Must have a DND Project Manager (PM) qualification (DND PM 1, DND PM 2 and DND PM 3) <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have experience in a work environment that required the application of the following regulations (demonstrated by examples): a. The United States government International Traffic in Arms Regulations (ITAR) that control the export and import of defense-related articles and services on the United States Munitions List (USML); and b. The Canadian government Controlled Goods Regulations (CGR). OR Department of National Defence Administration Orders and Directives related to Controlled Technology Access and Transfer (CTAT).
3.	Must have a minimum of three (3) years' experience as a member of a Department of National Defence (DND) Project Management Office for a Major Crown Project. OR Must have a minimum of three (3) years' experience as a member of an industry project management team contracted to deliver on a DND Major Crown Project. OR Must have a minimum of two (2) years' experience as the designated Project Manager responsible for a DND capital-funded aviation related project. The above experience must have been acquired within the past ten (10) years.
4.	Must have experience, demonstrated by detailed examples, in three (3) of the following program management activities:
a.	Preparing input to an investment plan change proposal or development of project approval documentation;
b.	Preparing input to a project opportunity and risk assessment;
c.	Preparing input for presentation to the Defence Capabilities Board;

d. Preparing input for project briefs;
e. Monitoring the implementation of the project against established goals, objectives and milestones;
f. Performing project control functions such as managing project plans and schedules, monitoring receipt, review, acceptance deliverables, identifying key milestones, reviewing project payment, managing risk;
g. Conducting post project reviews, audits, and developing lessons learned; or
h. Developing or evaluating deliverables and requirements Coordinating drafts and preparing for signature project documents and reports.

Table 33: Technical Writer, Group 4

Mandatory Requirements	
1.	Must have a certificate, diploma, or degree in archival studies, library sciences, or technical writing, or other discipline that focuses on information and documentation management from a recognized post-secondary institution*. OR Must have been an Aerospace Engineering Officer (AERE) within the DND or Canadian Armed Forces (CAF). OR Must have a Technologist Diploma in an aeronautical field; or must have been qualified as a Canadian Armed Forces aircraft technician. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have five (5) years' experience working as a librarian. OR Must have two (2) years' experience working as a librarian or technical writer within a government department. OR Must have one (1) year experience working as a librarian or technical writer in the Department of National Defence. OR Must have been the designated Technical Authority on a DND Publications Management Services (PMS) contract.
3.	Must be fluent* in both French and English. <i>*Fluent is defined as proficiency equivalent to the Public Service second language evaluation score of EEE</i>

Table 34: Web Content Management, Group 4

Mandatory Requirements	
1.	Must have a certificate, diploma, or degree from a recognized post-secondary institution*. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of three (3) years' experience in the last ten (10) years working as a web multi-media content specialist.
3.	Must have workplace experience, demonstrated by detailed examples, in each of the following activities:
a.	Creating web pages including multi-media design;
b.	Developing flowcharts (website flow maps) depicting website navigation and basic content; and
c.	Developing line diagrams showing the interactive connection between web pages

4. Must have experience with the following web content management software:
a. Graphic design software;
b. Adobe Acrobat Professional;
c. HTML, XML; and
d. Java.
5. Must have practical knowledge* of the following Treasury Board Secretariat policies and standards demonstrated by examples of their direct application on projects or tasks: <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Communications Policy of the Government of Canada;
b. Standard on Web Accessibility;
c. Standard on Web Usability;
d. Standard on Web Interoperability; and
e. Directive on Official Languages for Communications and Services.

Table 35: Training Instructor, Group 4

Mandatory Requirements
1. Must have a certificate, diploma or degree from a recognized post-secondary institution*, with two (2) years' experience as an on-line or classroom training specialist instructing on Aeronautical related studies. OR Must have served five (5) years in the last ten (years) as a Canadian Armed Forces Aeronautical Engineer or Aircrew OR Must have served (2) years as a Canadian Armed Forces qualified classroom instructor. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have demonstrated experience, supported by examples, in performing two or more of the following activities:
a. Designing and development of training
b. Conduct of training
c. Evaluation of training
d. Working with the Canadian Forces Individual Training and Education System (CFITES)* or an equivalent system <i>*CFITES is a management system designed to optimize the quality and quantity of individual training and education, while minimizing the resources required.</i>
e. instructing in an e-learning environment (e.g.: Distance Learning Network (DLN))

Table 36: Training Courseware Developer/E-Learning, Group 4

Mandatory Requirements
1. Must have a certificate, diploma or degree from a recognized post-secondary institution *, in one of the following fields: Educational technology or eLearning, AND: - two (2) years of demonstrated full-time experience as an eLearning Instructional Systems Design (ISD) courseware developer OR - two (2) years as a Learning Management System (LMS) operations specialist OR - two (2) years' experience on SABA Centra, DLN, SABA Publisher, OUTSTART, Articulate, or Pedagogue programmes.

<p>OR Must have a certificate, diploma or degree from a recognized institution* in Educational Technology, eLearning, Learning and Technology, Instructional Design AND: - five (5) years' of demonstrated full time experience in eLearning Instructional Systems Design (ISD) courseware development, and LMS operations specialist OR - two (2) years' experience on SABA Centra, DLN, SABA Publisher, OUTSTART Articulate, or Pedagogue programmes. OR Must have served three (3) years in the last (10) years as a Canadian Armed Forces Training Development Officer (TDO). <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must have (2) years of demonstrated experience working full time on e-learning training courseware development within a LMS in the last seven (7) years.</p>
<p>3. Must have demonstrated experience, supported by examples, in performing two or more of the following activities:</p>
<p>a. Training Design,</p>
<p>b. Training Development;</p>
<p>c. Conduct of Training; or</p>
<p>d. Training Evaluation.</p>
<p>4. Must have experience using either the Canadian Forces Individual Training and Education System (CFITES)* or an equivalent system. <i>*CFITES is a management system designed to optimize the quality and quantity of individual training and education, while minimizing the resources required.</i></p>

Table 37: Human Systems Integration (HSI), Group 4

Mandatory Requirements
<p>1. Must have an undergraduate degree from a recognized post-secondary institution* in engineering, psychology or science discipline. OR Must have a post graduate degree from a recognized post-secondary institution* in Ergonomics/Human Factors or Engineering, Psychology or Science discipline or specialist training and qualifications in human factors analysis and implementation related to aircraft design. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) classification within the CAF and have specialist training and qualifications in the field of human factors. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i></p>
<p>2. Must have a minimum of five (5) years' experience within the past ten (10) years performing human factors and/or human systems engineering specialist work in support of aircraft design or modification in military and/or civilian type aircraft.</p>
<p>3. Must have two (2) years' experience within the last seven (7) years in performing human factors / human system integration related engineering support to airworthiness certification activities using recognized civil or military standards, including review of design, work with basis of certification, work with certification plans, work with compliance programs and related compliance documentation.</p>
<p>4. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in at least three (3) of the following four (4) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i></p>

a. Aerospace human factor engineering and flight test principles, practices and regulations as applied to fixed and rotary wing aircraft.
b. Air operations and human factors engineering as it applies to aircraft certification and the establishment of airworthiness objectives through the application of recognized civil or military standards.
c. Analysis, synthesis and research methodologies, practices and tools to integrate analysis of data. Ability to discover facts and/or develop knowledge, concepts or interpretations and reformulate the results of these analyses into recommendations for action for the following Human Factors work areas: HFE field surveys & Questionnaires, Cognitive Task Analysis, Mission, Function Task Analysis, Formal Test Plans and Reports and anthropometric evaluations.
d. New and evolving technology, trends and developments in human factor engineering and investigations activities to keep abreast of the advances to enable cost effective and safe approaches to design, manufacture and maintain equipment and systems.

Table 38: System Safety, Group 4

Mandatory Requirements
1. Must have an undergraduate or master's degree from a recognized post-secondary institution* in engineering. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) classification within the CAF. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2. Must have specialist training and qualifications in aviation system safety.
3. Must have a minimum of ten (10) years' experience with at least five (5) years, within the past thirteen (13) years, related to system safety engineering.
4. Have demonstrated experience with a minimum of three (3) the following activities:
a. Performing Functional Hazard Analyses and System Safety Assessments,
b. Preparing Failure Modes & Effects Analyses and Reliability Analyses;
c. Performing safety analyses in accordance with ARP SAE 4761 and 4754;
d. Interpreting and applying military and/or civil aircraft design standards; or
e. Interpreting and applying military and/or civil aircraft certification standards.
5. Must have a minimum of two (2) years' experience in the last seven (7) years in the practical and theoretical assessment of avionics functions that are critical to flight.
6. Must have a minimum of three (3) years of practical experience within the last seven (7) years in aircraft systems certification including major design changes or the certification of new aircraft (including review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.) Some of this experience must have been related to aircraft flight critical systems.
7. Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in at least four (4) of the following six (6) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a. Engineering principles, practices and current technology in the field of aircraft systems and equipment and knowledge of design, manufacture, maintenance and operation of aircraft systems.
b. Principles, practices and current technology in the field of aircraft systems safety engineering and

the application of 1309 Design Analysis, SAE ARP 4761 and SAE ARP 4754 to aircraft system certification.
c. Avionics systems design and functioning applicable to communications, navigation, flight management and avionics control/display systems
d. Aircraft ground and flight test principles and practices as applied to fixed and rotary wing aircraft.
e. Application of airworthiness certification requirements applicable to aircraft systems.
f. The principles, practices and current technology in the field of aircraft software.

Table 39: Flight Test, Group 4

Mandatory Requirements	
1.	Must have an undergraduate or master's degree from a recognized post-secondary institution*. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have specialist flight test training and qualifications in either:
a.	Flight test pilotage, or
b.	Flight test engineering.
3.	Must have a minimum of five (5) years' experience within the past eight (8) years, in a military, or government, or commercial aerospace environment, performing activities as a flight test pilot or flight test engineer. Credit will only be given for experience in the following areas:
a.	providing flight test support to the certification of fixed and/or rotary-wing aircraft;
b.	performing flight test support to flight and structural stores clearances;
c.	Flight test piloting and/or flight test engineering support to design, manufacturing or testing of military or commercial aircraft.
4.	Must have two (2) years' experience within the last seven (7) years in flight test support to the certification of military or civilian fixed and/or rotary-wing aircraft, including the review of design, work with basis of certification, work with certification plan, work with compliance programs and related compliance documentation.
5.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in at least four (4) of the following seven (7) areas. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>
a.	Aerodynamics, including experimental methods and ground testing technology, aircraft flight mechanics, electro-mechanical engineering, systems used for data acquisition (computers, instrumentation etc.) data acquisition amend processing, and aeronautical, electrical, electronic, mechanical instruments and equipment.
b.	New and evolving technologies in advanced aerodynamics for fixed wing and rotary wing aircraft, computer analysis techniques, computational aerodynamics and the impact of digital flight controls on flight dynamics.
c.	Air operations, aircraft flight dynamics, aero flight elasticity, store separation, ballistics and aircraft weapon.
d.	The functions and operational techniques of math simulation models used to analyze ground and aircraft flight test data to provide aircraft and aircraft weapons clearances.
e.	Aerospace engineering and flight test principles, practices regulations and current technology as applied to fixed and rotary wing.
f.	Regulatory concepts, principles, and standards used to achieve airworthiness certification.
g.	Systems safety assessment and functional hazard analysis.

Table 40: Aircrew Operations, Group 4

Mandatory Requirements	
1.	Must have an undergraduate or postgraduate degree from a recognized post-secondary institution* in an aerospace related discipline. OR Must have served as DND/CAF or Allied aircrew qualified as Test Pilot, Test Engineer, Test/Trials Manager or Electronic Warfare Officer (EWO). <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of 2000 hours combined as aircrew in two or more fixed- wing multi-engine aircraft types. OR Must have 1000 hours as aircrew in two or more rotary wing, training, fast-jet or unmanned aircraft types.
3.	Must have a total of ten (10) years of experience within the last fifteen (15) years in the following areas: a. Aircraft operations; b. Aviation safety; c. Airworthiness regulation and/or certification; d. Aircraft maintenance; e. Flight test and evaluation; f. Flight simulation; or g. Electronic warfare.

Table 41: Weapons, Group 4

Mandatory Requirements	
1.	Must have a degree in electrical and/or electronic engineering from a recognized post-secondary institution*. OR Must have a degree in a science or engineering discipline, and specialized education in Weapons from a recognized post-secondary institution*. OR Must have obtained the rank of Capt or above within the Aerospace Engineering Officer (AERE) or Communications and Electronics Engineering (CELE) trade within the CAF and two (2) years' experience to this related technical field. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must provide details of training in at least one (1) of the following Weapons domains: a. Ammunition Technical Authority (ATO); b. Qualified Ammunition Technical Authority (QATA); or c. Aerospace Armament Engineering.
3.	Must have a minimum of 5 (5) years' experience in Weapons System Acquisition, Weapons System Performance Assessment, and Weapons Engineering Support.
4.	Must have experience with integration of weapons systems in military type aircraft.
5.	Must provide details, including at least one (1) example, of work performed or formal education that clearly demonstrates knowledge* in Safety and Suitability for Service (S3) assessment methodology. <i>*For the purpose of the example, knowledge is defined as the comprehension of a particular discipline or sphere of activities. It is represented either through the successful completion of a training course/program and/or the practical application of the techniques and procedures within the discipline or sphere of activities.</i>

Solicitation No. - N° de l'invitation
W8485-205765/A
Client Ref. No. - N° de réf. du client
W8485-205765/A

Amd. No. - N° de la modif
000
File No. - N° du dossier
108zh.W8485-205765/A

Buyer ID - Id de l'acheteur
108zh
CCC No./N° CCC - FMS No./N° VME

Table 42: Modeling and Simulation (M&S), Group 4

Mandatory Requirements	
1.	Must have a degree in engineering or science applicable to the aerospace of Modeling and Simulation (M&S) field from a recognized post-secondary institution*. <i>*Please see note in appendix 1 to attachment 2 to part 4.</i>
2.	Must have a minimum of ten (10) years' work experience in Modeling and Simulation (M&S).
3.	Must have a minimum of two (2) years' experience' within the last ten (10) years, in support of M&S related development and acquisition projects.
4.	Must have a minimum of five (5) years' experience within the last ten (10) years in developing and conducting computer simulations of aerospace vehicles and systems using advance mathematical modeling.

*APPENDIX 1 to ATTACHMENT 2 to PART 4

The proposed resource must have a certificate, diploma, or degree from a **recognized** post-secondary institution.

The list of recognized organizations can be found on the Canadian Information Centre for International Credentials website, at the following internet link:

<http://www.cicic.ca/868/Search-the-Directory-of-Educational-Institutions-in-Canada/index.canada>

For foreign educational institutions, an assessment report issued by one of members of the Alliance of Credential Evaluation Services of Canada (ACESC) attesting the credentials will be accepted. Please visit this site for more information:

<http://www.cicic.ca/1374/obtain-an-academic-credential-assessment-for-general-purposes/index.canada>

(The Bidder must provide a copy of the certificate, diploma, or degree, or the credentials attestation report, with the Bid Submission).

Please note that for all mandatory references pertaining to **university engineering or science degrees** in this Technical Evaluation Plan the following definitions apply:

University undergraduate degrees in Engineering or Science must be from a recognized organization listed on the Canadian Information Centre for International Credentials website, at the following internet link:

<http://www.cicic.ca/868/Search-the-Directory-of-Educational-Institutions-in-Canada/index.canada>

(Copy of certificate to be provided with the Bidder's proposal);

OR

For foreign educational institutions, degrees can be recognized through confirmation:

- a. *by one of members of the Alliance of Credential Evaluation Services of Canada (ACESC) attesting the credentials are acceptable. Please visit this site for more information:*

<http://www.cicic.ca/1374/obtain-an-academic-credential-assessment-for-general-purposes/index.canada> ; or,

- b. *under the Washington Accord. Please visit this site for more information:*

<http://www.engc.org.uk/education-skills/course-search/acad/>

(Confirmation of recognition to be provided with the Bidder's proposal);

OR

Finally, the candidate's education credentials will be considered compliant if the candidate is deemed eligible for registration as a Professional Engineer by a recognized provincial licensing body.

(Proof of which is to be provided with the Bidder's proposal).