National Defence

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Défense nationale

Quartier général de la Défense nationale
Ottawa (Ontario)
K1A 0K2

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À :

Email : John.Caldwell@forces.gc.ca

Courriel: John.Caldwell@forces.gc.ca

Proposal To: National Defence Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods and services listed herein and on any attached sheets at the price(s) set out therefore.

Proposition à : Défense nationale Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens et services énumérés ici et sur toute feuille ci-annexée, au(x) prix indique(s).

Solicitation Closes
L'invitation prend fin
At – à : 14h00

On – Le : 12 January 2021

Time Zone: Eastern Time
Fuseau horaire: Heure de l'Est

Title/Titre **.338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge**	**Solicitation No – N° de l'invitation** **W8476-206308/A**
Date of Solicitation – Date de l'invitation 26 November 2020	
Address Enquiries to – Adresser toutes questions à Mr. John Caldwell, DLP 3-1-C DGLEPM/DLP (by Email to John.Caldwell@forces.gc.ca)	
Telephone No. – N° de téléphone **By EMail**	**FAX No – N° de fax** **By EMail**
Destination See Annex B to Part 6 – Basis of Payment Voir les détails en annexe B de la partie 6 – Base de paiement	
Instructions: Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item. **Instructions:** Les taxes municipals ne s'aapliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés "rendu droits acquittés", tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.	

Delivery required - Livraison exigée See Herein: Voir ici:	Delivery offered - Livraison proposée
Vendor Name and Address - Raison sociale et adresse du fournisseur	
Name and title of person authorized to sign on behalf of vendor (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur (caractère d'imprimerie) Name/Nom Title/Titre Signature Date	

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement applicable to this procurement.

1.2 Statement of Work

The requirement is for the production and delivery of .338 Lapua Magnum Armour Piercing Incendiary sniper ammunition, and support to DND in the qualification of the proposed ammunition for its;

- Safety and Suitability for Service (S3) assessment;
- Article 36 Legal Review;
- environmental and occupational health and safety assessment;
- type classification; and,
- associated logistic, system engineering, and program management requirements.

The ammunition is for use with the Canadian Armed Forces (CAF) .338 Lapua Magnum compatible weapon system(s). The ammunition must be compliant to the Commission internationale permanente pour l'épreuve des armes à feu portatives (CIP) standard.

Under the resulting contract, the successful contractor will support DND in its qualification of the proposed ammunition. Support services may include the conduct of:

- failure investigations;
- the implementation of risk mitigation measures;
- engineering change management; and,
- responding to technical questions;

arising out of DND's qualification of the proposed ammunition.

A quantity of 19,000 cartridges will be deliverable to the CAF on or before 01 November 2021. Options for up to an additional 50,000 cartridges will be deliverable in each of Government fiscal year 2022/23 and 2023/24. Deliverables also include the provision of technical information and data, including Integrated Logistics Support (ILS) related data, required to bring the Sniper Cartridge into service and authorized for CAF transport and use. All documentation deliverables must be delivered by 30 November 2021.

The requirement is detailed in:

Annex A-1 to Part 6 – Statement of Work, including the following Appendices
Appendix 1 – Contract Deliverable Requirements List
Appendix 2 – Data Item Description
Annex A-2 to Part 6– Performance Specifications, including the following Appendices
Appendix 1 – System Acceptance Test
Appendix 2 – S3 Sequential Test Requirements
Appendix 3 – S3 Non-Sequential Test Requirements

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation, with the following modifications:

a) Section 02 - Procurement Business Number, is deleted in its entirety.

b) Section 05 – Submission of Bids, Subsection 2.d is deleted in its entirety and replaced with the following:

"d. Send its bid only to the DND Email address specified on Page 1 of the bid solicitation."

c) Section 05 – Submission of Bids, Subsection 4 is amended as follows:
Delete: sixty (60) days Insert: one hundred and twenty (120) days

d) Section 06 – Late Bids, is deleted in its entirety.

e) Section 07 – Delayed Bids, is deleted in its entirety and replaced with the following:

"It is the Bidder's responsibility to ensure that the Contracting Authority has received the entire submission. Misrouting or other electronic delivery issues resulting in late submission of bids will not be accepted."

f) Section 08 – Transmission by Facsimile or by epost Connect, is deleted in its entirety.

g) Section 20 – Submission of Bids, Subsection 2 is deleted in its entirety, and replaced with the following:

"Enquiries concerning receipt of bids may be addressed to the Contracting Authority identified in the Bid Solicitation."

2.1.1 SACC Manual Clauses

B1000T (2014-06-26), Condition of Material – Bid
A9130T (2019-11-28), Controlled Goods Program – Bid
A9033T (2012-07-16) Financial Capability

2.2 Electronic Submission of Bids

a) Bids must be submitted only to the Department of National Defence by the date, time and place indicated on page 1 of the bid solicitation. Bids must be received electronically as noted in subparagraph b).

b) **Electronic Submissions**: Individual e-mails exceeding five (5) megabytes, or that includes other factors such as embedded macros and/or links, may be rejected by the DND e-mail system and/or firewall(s) without notice to the Bidder or Contracting Authority. Larger bids may be submitted through more than one e-mail. The Contracting Authority will confirm receipt of documents. It is the Bidder's responsibility to ensure that the Contracting Authority has received the entire submission. Bidders should not assume that all documents have been received unless the Contracting Authority confirms receipt of each document. In order to minimize the potential for technical issues, Bidders are requested to allow sufficient time before the closing time and date to confirm receipt. Technical and financial documents received after the closing time and date will not be accepted.

Due to the nature of the bid solicitation, bids transmitted by facsimile or transmitted using the epost Connect service provided by Canada Post Corporation will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Government Supplied Documentation

The documents listed below form part of this bid solicitation, and will form part of any resultant contract:

D-09-002-003/SG-000 Specification for Palletization of Ammunition;

D-09-002-004/SG-000 Standard, Identification of Ammunition and Ammunition Packaging.

D-02-006-008/SG-001 National Defence Standard, The Design Change, Deviation and Waiver Procedure; and,

D-09-002-009/SG-000 Standard Procedures for the Type Classification of Ammunition and Explosives

The above listed documentation is being made available to bidders in PDF file format. Bidders interested in receiving the above listed documentation must submit their requests to the EMail address specified on Page 1 of this bid solicitation. Requests for documentation must be submitted complete with a signed copy of the Non-Disclosure Agreement contained in Attachment 1 to Part 2 of this bid solicitation. The Non Disclosure Agreement must be signed by a senior representative of the Bidder. Documentation will not be released, for any request not including a duly signed Non-Disclosure Agreement.

Attachment 1 to Part 2
Non Disclosure Agreement

The Bidder hereby acknowledges that the Government Supplied Documentation, (hereinafter referred to as “INFORMATION”) being made available to it under this bid solicitation, and for purposes of conduct of the Work, may contain data and information that is classified, confidential, or proprietary to Canada, its contractors or to other third parties. In consideration of the INFORMATION being disclosed to the Bidder, the Bidder hereby agrees:

a. to maintain the confidentiality of the INFORMATION ;

b. that the INFORMATION will not be copied, disclosed or provided to another party without the consent of Canada;

c. to not use the INFORMATION except as may be necessary for preparation of a bid in response to this bid solicitation, or to carry out the Work for Canada;

d. to ensure that any prospective subcontractor is subject to the same Conditions;

e. to return the INFORMATION to the Contracting Authority prior to bid closure for this solicitation, if no bid is made; and

f. to return to the Contracting Authority, all documentation, copies, notes, diagrams, computer memory, media and other materials containing any portion of the INFORMATION, or confirm to Canada, in writing, the destruction of the INFORMATION within five (5) days after being requested to do so by the Contracting Authority.

Certification of a senior official:

Name: _____

Title: _____

Company: _____

Address: _____

Telephone number: _____

Email Address: _____

Signature and Title: _____

Date: _____

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid – One soft copy in PDF format;

Section II: Financial Bid – One soft copy in PDF format; and,

Section III: Certifications – One soft copy in PDF format.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Bidders may use Attachment 2 to Part 3 to indicate their prices. If Bidders choose to use Attachment 2 to Part 3 to indicate their prices, Bidders must include Attachment 2 to Part 3 in their financial bid.

Canada requests that Bidders use a numbering system that corresponds to the bid solicitation in the preparation of their bid.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work. Requirements of the technical bid, including mandatory technical evaluation criteria and the technical evaluation methodology are detailed in Attachment 1 to Part 3.

The Technical bid must include the required proofs of compliance, as detailed in Column "4" of the Compliance Matrix included in Annex A of Attachment 1 to Part 3.

Section II: Financial Bid

Bidders must submit their financial bid as follows:

1) For performance of all the Work, (excluding options):
   - Bidders must submit a firm lot price, Delivered Duty Paid (DDP) at the destinations specified in Attachment 2 to Part 3, Incoterms 2010, and Applicable Taxes extra. The total amount of Applicable Taxes must be shown separately;
   - Bids must be submitted in Canadian dollars;
   - Excise Taxes, if applicable, included; and,
   - Canadian Customs Duty in accordance with the terms of the resulting Contract.

2) For options:
   - Bidders must submit firm unit prices Delivered Duty Paid (DDP) at the destinations for each option, as specified in Attachment 2 to Part 3, Incoterms 2010, Applicable Taxes extra and shown separately;
   - Bids must be submitted in Canadian dollars;
   - Excise Taxes, if applicable, included; and,
   - Canadian Customs Duty in accordance with the terms of the resulting Contract.

3) Bidders should present their:
   - firm lot price for performance of the Work specified in Annex A-1 to Part 6 – Statement of Work (excluding options); and,
   - firm unit prices for options,

   by completing Attachment 2 to Part 3 – Pricing Schedule.

4) Bidders should provide a breakdown of their proposed firm lot price for performance of the Work detailed in Annex A-1 – Statement of Work, (excluding options). As well, Bidders should provide a breakdown of their proposed firm unit prices for options.

3.1.1 Electronic Payment of Invoices – Bid

If the Bidder is willing to accept payment of invoices by Electronic Payment Instruments, complete Attachment 3 to Part 3 - Electronic Payment Instruments, to identify which ones are accepted.

If Attachment 3 to Part 3 is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

Attachment 1 to Part 3
Instructions to Bidders and Technical Evaluation

1 Scope

1.1 Purpose

1.1.1 The purpose of this attachment is to describe the requirements of the technical bid and the methodology that will be used to conduct the technical evaluation of bids submitted in response to this bid solicitation.

1.1 Bidders Instructions

1.1.1 Bidders must comply with all mandatory criteria specified in the bid solicitation, including all mandatory requirements detailed in the Compliance Matrix, included in Annex A to this attachment.

1.2 Acronyms

LAT	Lot Acceptance Test
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Governmental Entity
NEQ	Net Explosive Quantity
QA	Quality Assurance

2 Technical Bid Evaluation Methodology

2.1 Technical Evaluation

2.1.1 The technical evaluation will consist of an assessment of:

- the Bidder's response to the mandatory technical requirements detailed in the Compliance Matrix - Annex A to this attachment; and,
- the technical and documentary evidence provided by the Bidder in response to the requirements detailed in the Compliance Matrix.

2.1.2 Failure to provide sufficient detail to enable a complete evaluation of the proposal against the mandatory requirements of the Compliance Matrix will deem the bid non-responsive.

3 Bid Submission Deliverables

3.1 Compliance Matrix

3.1.1 The Bidder should provide as part of its bid, a completed Compliance Matrix in accordance with Annex A to this attachment, including proofs of compliance as specified in the Compliance Matrix.

3.1.2 Notwithstanding the submitted Compliance Matrix, the Bidder must, at time of bid closing, meet all mandatory technical requirements and provide the required documentary evidence, all as identified in the Compliance Matrix. References to external sources and web sites will not be accepted, nor evaluated.

3.1.3 Proof of Compliance Column

3.1.3.1 Column 4 of the Compliance Matrix instructs bidders on the type of data that must be provided with the bid in order to demonstrate compliance against a specific requirement. More specifically, required data includes:

Attachment 1 to Part 3

Instructions to Bidders and Technical Evaluation

a. Test Reports – For the Mandatory Criteria which specify that the required Proof of Compliance is a "Test Report", all required tests must have been conducted by accredited independent laboratories, university laboratories, or government laboratories, all experienced with testing the commodity being delivered, and all within the jurisdiction of NATO member states. Test reports conducted by the manufacturer will also be accepted if they are signed off by an independent government supplied Quality Assurance (QA) officer.

b. Documentary Compliance - For the Mandatory Criteria which specify "Documentary Compliance" in Column 4 of the Compliance Matrix, the Bidder must provide one or more of the following types of documents in the following order of precedence:

   i. independent third party test reports (highest in order of precedence);

   ii. internal test reports;

   iii. engineering drawings;

   iv. QA documentation;

   v. material specifications;

   vi. product specifications; or,

   vii. analysis (lowest in order of precedence).

   The Bidder is encouraged to provide the highest level of documentary compliance proof that is available to prove compliance based on the order of precedence identified above. Where possible, more than one of the above referenced forms of documentary compliance may be used to demonstrate compliance. In some instances, documentary compliance can only be proven by submitting independent third party test reports or internal test reports.

c. Manufacturer Documentation – For the Mandatory Criteria which specify "Manufacturer Documentation", in Column 4 of the Compliance Matrix, the documentation provided by the Bidder must demonstrate that the documentation was either produced or approved by the manufacturer of the sniper cartridge that is proposed in the bid.

d. Compliance Statement - For the Mandatory Criteria which specify "Compliance Statement", in Column 4 of the Compliance Matrix, the Bidder must sign and submit with its bid, the compliance certification as detailed in Annex "B" to this Attachment.

3.1.4 Bidder's Self-Assessment Column

3.1.4.1 In Column 5 of the Compliance Matrix, the Bidder should indicate whether they are "compliant" or "non-compliant" against the applicable mandatory requirement.

3.1.5 Evidence Location in Bid Package Column

3.1.5.1 In Column 6 of the Compliance Matrix, the Bidder should clearly identify where in the bid package (document, page and paragraph) the evaluator can find information that supports the Bidder's compliance against the applicable mandatory requirement.

3.1.6 Bidder's Statement and Comments Column

3.1.6.1 In Column 7 of the Compliance Matrix, the Bidder should provide additional relevant information that they would like to bring to the attention of the evaluator for consideration during their assessment of each of the mandatory requirements.

Attachment 1 to Part 3
Instructions to Bidders and Technical Evaluation

3.2 Ammunition Lot Acceptance Test (LAT) Specification

3.2.1 The Bidder must provide as part of its bid, the ammunition manufacturer's Lot Acceptance Test Specification that is used to assess the quality of serial production lots. The Lot Acceptance Test Specification submitted must be for the sniper cartridge that is proposed in the bid.

3.3 Ammunition Lot Acceptance Test (LAT) Reports

3.3.1 The Bidder must provide as part of its bid, the ammunition manufacturer's LAT reports from 2 separate serial production lots. The Lot Acceptance Test Reports submitted must be for the sniper cartridge that is proposed in the bid.

3.4 Technical Data Sheet

3.4.1 The Bidder must provide as part of its bid, a Technical Data Sheet. The Technical Data Sheet must be for the sniper cartridge that is proposed in the bid.

3.4.2 The Technical Data Sheet must contain the following data:

a) Cartridge Photograph and/or line drawing;

b) Part or Model Number;

c) Cartridge NATO Stock Number (If available);

d) Cartridge description, theory of operation and terminal effects;

e) Projectile weight, composition and configuration;

f) Hazard Classification Code and United Nations Number;

g) Inner packaging description; and,

h) Outer packaging (ammunition canister) description.

3.5 Bidder Status

3.5.1 The Bidder must be:

a) the original manufacturer for the sniper cartridge that is proposed in the bid; or,

b) an entity which has a currently valid corporate agreement with the original manufacturer for the sniper cartridge that is proposed in the bid. The corporate agreement must have been entered into prior to the date of this bid solicitation, and demonstrate that the Bidder is an authorized representative of the original manufacturer for the sniper cartridge that is proposed in the bid.

ANNEX A TO ATTACHMENT 1

COMPLIANCE MATRIX

1 Mandatory Criteria	2 Bid Solicitation Reference	3 Mandatory Requirement	4 Required Proof of Compliance	5 Bidder's Self-Assessment	6 Evidence Location in Bid Package	7 Bidder's Statement and Comments
1	Annex A-2 to Part 6 Para 5.1.1	.338 Lapua Magnum. The proposed Sniper Cartridge must be IAW the .338 Lapua Magnum cartridge as defined by Commission internationale permanente pour l'épreuve des armes à feu portatives (CIP)/ Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) standards in terms of dimensions, pressure and headspace. The CIP table of dimensions and pressures for the .338 Lapua Magnum cartridge can be found at the following links: https://bobp.cip-bobp.org/uploads/tdcc/tab-i/338-lapua-mag-en.pdf; and https://bobp.cip-bobp.org/uploads/annexe/annexeiii-en-cr1.pdf.	Test Report: Lot Acceptance Test Reports showing Maximum Average Pressure. and Documentary Compliance: Dimensioned Engineering Drawing of Cartridge indicating cartridge dimensions L1, L2, L3, L6 (cartridge overall length), R1, and G1 (projectile diameter) IAW CIP Table of Dimensions for Cartridges and Chambers for the .338 Lapua Magnum cartridge.			
2	Annex A-2 to Part 6 Para 5.1.2	Compatibility with Weapons. The proposed Sniper Cartridge must function properly and safely when used with weapons chambered for .338 Lapua Magnum.	Test Report: Test report demonstrating proper and safe functioning in a weapon chambered for .338 Lapua Magnum. This could be factory function and casualty testing with a .338 Lapua Magnum weapon or other weapon system qualification report(s).			
3	Annex A-2 to Part 6 Para 5.2.1	Projectile Sub-Component. The Sniper Cartridge must incorporate an armour piercing, incendiary, match projectile.	Documentary Compliance The Bidder must supply documentation demonstrating that the projectile consists of an armour piercing incendiary projectile.			
4	Annex A-2 to Part 6 Para 5.2.2	Primer Sub-Component. The Sniper Cartridge must use a percussion primer that is safe for military use.	Documentary Compliance The Bidder must supply documentation demonstrating that the cartridge uses a primer that is safe for military use.			
5	Annex A-2 to Part 6 Para 5.2.3	Propellant. The Sniper Cartridge must use a propellant that is safe for military use.	Documentary Compliance The Bidder must supply documentation demonstrating that the cartridge uses a propellant that is safe for military use.			
6	Annex A-2 to Part 6 Para 5.3.1	C21 Compatibility. The Sniper Cartridge must be compatible with all operational and non-operational aspects of the C21.	Compliance Statement The Bidder must provide the certification detailed in Annex "B" of this Attachment.			
7	Annex A-2	C21 Function and Casualty. The Sniper Cartridge must operate	Compliance Statement			

1 Mandatory Criteria	2 Bid Solicitation Reference	3 Mandatory Requirement	4 Required Proof of Compliance	5 Bidder's Self-Assessment	6 Evidence Location in Bid Package	7 Bidder's Statement and Comments
	to Part 6 Para 5.4.1	safely and reliably in the C21 at the Extreme High & Low Operational and Standard Ambient Conditions without experiencing Defects and Incidents that exceed the C21 Function Casualty Requirement as defined in Test 2 of the SAT Requirements.	The Bidder must provide the certification detailed in Annex "B" of this Attachment.			
8	Annex A-2 to Part 6 Para 5.5.1	Precision. The proposed Sniper Cartridge must achieve a mean Extreme Spread of 1.5 MOA or less when fired against a target at 300m at +21°C IAW the Precision Test Procedure (paragraph 5.5.2 of the performance specification – Annex A-2).	Test Report: The test report must demonstrate the require precision and provide calculations showing that a mean Extreme Spread of 1.5 MOA or less has been achieved.			
9	Annex A-2 to Part 6 Para 5.6.1	Velocity Variation. The muzzle velocity standard deviation of the projectile must be less than 6 m/s for 20 cartridges conditioned at 21°C.	Test Report: Lot Acceptance Test Report(s) demonstrating velocity standard deviation.			
10	Annex A-2 to Part 6 Para 5.7.1	Terminal Effects. The proposed Sniper Cartridge projectile, when striking at a 0 degree angle of obliquity (normal to the line of fire), must completely penetrate a 10mm thick steel plate with a Brinell Hardness of 400, 100% of the time when fired from a .338 Lapua Magnum precision test barrel that is no longer than 686mm at a range of 500m.	Test Report: The provided test report must demonstrate that the proposed Sniper Cartridge meets the terminal effects requirement.			
11	Annex A-2 to Part 6 Para 5.7.2	Behind Armour Effects. Following penetration of the steel target at paragraph 5.7.1, the proposed Sniper Cartridge projectile, or fragments of the projectile, must penetrate a 1.25mm mild steel plate at 10cm opposite the armour strike surface.	Test Report: The provided test report must demonstrate that the proposed Sniper Cartridge meets the behind armour effects requirement.			
12	Annex A-2 to Part 6 Para 5.7.3	Incendiary Effects. The proposed Sniper Cartridge projectile must produce incendiary effects.	Test Report: Test report demonstrating that the incendiary effects of the projectile are capable of igniting vaporized fuel.			
13	Annex A-2 to Part 6 Para 5.8.1	Operational Environment. The Sniper Cartridge will be used for CAF sniper operations and training exercises. Therefore it will be exposed to, and must operate in a wide variety of extremely demanding environments and operational situations ranging from urban areas, through dense vegetation to open savannah and desert. It will be transported by sniper units deployed on foot, in wheeled or tracked vehicles on roads and cross country, in naval craft, helicopters and by parachute. It must remain operable in almost all weather conditions and in climatic zones ranging from hot, dry desert to high arctic conditions.	Compliance Statement The Bidder must provide the certification detailed in Annex "B" of this Attachment.			
14	Annex A-2	Storage and Handling - Extreme High Storage Conditions. The	Compliance Statement			

1 Mandatory Criteria	2 Bid Solicitation Reference	3 Mandatory Requirement	4 Required Proof of Compliance	5 Bidder's Self-Assessment	6 Evidence Location in Bid Package	7 Bidder's Statement and Comments
	to Part 6 Para 5.8.2	Sniper Cartridge must meet its performance requirements and function safely following no less than 72 hours of storage at the defined Extreme High Storage Conditions	The Bidder must provide the certification detailed in Annex "B" of this Attachment.			
15	Annex A-2 to Part 6 Para 5.8.3	Storage and Handling - Extreme Low Storage Conditions. The Sniper Cartridge must meet its performance requirements and function safely following no less than 72 hours of storage at the defined Extreme Low Storage Conditions.	Compliance Statement The Bidder must provide the certification detailed in Annex "B" of this Attachment.			
16	Annex A-2 to Part 6 Para 5.8.4	Operational – Standard Ambient Conditions. The proposed Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Standard Ambient Conditions.	Test Report: Lot Acceptance Test Report(s) demonstrating safe functioning from a .338 test barrel at +21 Degrees Celsius.			
17	Annex A-2 to Part 6 Para 5.8.5	Operational – Extreme High Operational Conditions. The proposed Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Extreme High Operational Conditions.	Test Report: Lot Acceptance Test Report(s) demonstrating safe functioning from a .338 test barrel at +52 Degrees Celsius.			
18	Annex A-2 to Part 6 Para 5.8.6	Operational – Extreme Low Operational Conditions. The proposed Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Extreme Low Operational Conditions.	Test Report: Lot Acceptance Test Report(s) demonstrating safe functioning from a .338 test barrel at -54 Degrees Celsius.			
19	Annex A-2 to Part 6 Para 5.8.8	Waterproof. Untreated Sniper Cartridges must be waterproof in accordance to the test procedure and sentencing criteria of the MCMOPI: AC/225(DSS)D(2013)0014(PFP), Section 27	Test Report: Lot Acceptance Test Report(s) demonstrating waterproofness.			
20	Annex A-2 to Part 6 Para 5.9.1	Shelf Life - Packaged. The proposed Sniper Cartridge must have a packaged shelf life of at least 10 years when stored at the Standard Ambient Conditions.	Documentary Compliance: The Bidder must supply an analysis supported by technical documentation demonstrating a shelf life of at least 10 years.			
21	Annex A-2 to Part 6 Para 5.10.5	Hazard Classification Code (HCC). The packaged Sniper Cartridge must have an HCC of 1.4.	Documentary Compliance: The Bidder must supply documentation that supports the HCC classification. This may include a determination of the HCC from a national authority such as Natural Resources Canada.			
22	Attachment	The Bidder must provide, with their bid submission, the	Manufacturer Documentation:			

1 Mandatory Criteria	2 Bid Solicitation Reference	3 Mandatory Requirement	4 Required Proof of Compliance	5 Bidder's Self-Assessment	6 Evidence Location in Bid Package	7 Bidder's Statement and Comments
	1 to Part 3 Para 3.2.1	ammunition manufacturer's Lot Acceptance Test Specification that is used to assess the quality of serial production lots.	The original manufacturer's LAT Specification for the sniper cartridges proposed in the bid.			
23	Attachment 1 to Part 3 Para 3.3.1	The Bidder must provide, with their bid submission, ammunition manufacturer's LAT reports from 2 separate serial production lots.	Manufacturer Documentation: The original manufacturer's LAT reports from 2 separate serial production lots, for the sniper cartridges proposed in the bid.			
24	Attachment 1 to Part 3 Para 3.4.1 Para 3.4.2	The Bidder must provide, with their bid submission, a Technical Data Sheet. The Technical Data Sheet must contain the following data: a) Cartridge Photograph and/or line drawing; b) Part or Model Number; c) Cartridge NATO Stock Number (If available); d) Cartridge description, theory of operation and terminal effects; e) Projectile weight, composition and configuration; f) Hazard Classification Code and United Nations Number; g) Inner packaging description; and, h) Outer packaging (ammunition canister) description.	Manufacturer Documentation: The original manufacturer's Technical Data Sheet for the sniper cartridges proposed in the bid, and which contains the information detailed at Attachment 1 to Part 3, Para 3.4.2 must be submitted with the bid. The Technical Data Sheet must contain the following data: a) Cartridge Photograph and/or line drawing; b) Part or Model Number; c) Cartridge NATO Stock Number (If available); d) Cartridge description, theory of operation and terminal effects; e) Projectile weight, composition and configuration; f) Hazard Classification Code and United Nations Number; g) Inner packaging description; and, h) Outer packaging (ammunition canister) description.			
25	Attachment	The Bidder must be:				

1 Mandatory Criteria	2 Bid Solicitation Reference	3 Mandatory Requirement	4 Required Proof of Compliance	5 Bidder's Self-Assessment	6 Evidence Location in Bid Package	7 Bidder's Statement and Comments
	1 to Part 3 Para 3.5.1	a. the original manufacturer for the sniper cartridge that is proposed in the bid; or, b. an entity which has a currently valid corporate agreement with the original manufacturer for the sniper cartridge that is proposed in the bid. The corporate agreement must have been entered into prior to the date of this bid solicitation, and demonstrate that the Bidder is an authorized representative of the original manufacturer for the sniper cartridge that is proposed in the bid.	The Bidder must provide documentation demonstrating that it is the original manufacturer of the sniper cartridge that is proposed in the bid, or that it has a currently valid corporate agreement (as defined in the reference under Column 2) with the original manufacturer for the sniper cartridge that is proposed in the bid.			

ANNEX B TO ATTACHMENT 1

BIDDER CERTIFICATION TO THE STATEMENT OF WORK AND PERFORMANCE SPECIFICATIONS

The Bidder must submit a compliance certification in the following format, as part of its proposal.

"The Bidder hereby certifies that the proposed goods and services will fully and unconditionally meet or exceed all requirements detailed in:

- The Statement of Work, included at Annex "A-1" of this bid solicitation, and the appendices attached thereto; and,
- The Performance Specifications, included at Annex "A-2" of this bid solicitation, and the appendices attached thereto.

_____ _____

Authorized representative of the Bidder Date"

ATTACHMENT 2 TO PART 3 - PRICING SCHEDULE

Bidders should complete this attachment and submit it as part of their financial bid. This attachment is divided into four parts:

1) The proposed firm lot price for performance of all the Work as detailed in Table 3.2.1 below;
2) The proposed firm unit prices for each option as detailed in Table 3.2.2 below;
3) Calculation of the Total Evaluated Price; and,
4) Price Breakdown.

1) Firm Lot Price

The Bidder must propose a firm lot price for the performance of all the Work, as detailed in Table 3.2.1 below:

Table 3.2.1 – Firm Lot Price

Column 1	Column 2	Column 3	Column 4
Work Description	Required Delivery Date	Firm Lot Price	Proposed Delivery Date
Performance of all the Work detailed in Annex A-1 to Part 6 – Statement of Work, including all of its Appendices and Annexes, but excluding options; and, Delivery of .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridges (Production Version in accordance with Annex A-1) to Canadian Forces Ammunition Depot (CFAD) Angus, CFAD Dundurn, and CFB Valcartier) as follows: CFAD Angus – 4,000 Units CFAD Dundurn -- 6,000 Units CFAD Valcartier – 9,000 Units	No Later than 30 November 2021[1]	$CAD _____	No Later than _____

Note 1: The required date for delivery of each CDRL item to its destination (NDHQ, Ottawa) is detailed in Annex A-1 to Part 6 – Statement of Work, Appendix 1 – Contract Deliverable Requirements List. The required date for delivery of all cartridges (production version) to all destinations (CFAD Dundurn, CFAD Angus, and CFAD Valcartier) is 01 November 2021. All work must be delivered no later than 30 November 2021.

ATTACHMENT 2 TO PART 3
PRICING SCHEDULE

2) Firm Unit Prices for Options

The Bidder must propose a firm unit price for each Option Quantity Range, as detailed in Table 3.2.2 below:

Table 3.2.2 – Firm Unit Prices for Options

	Work Description/Period						
	Options for the delivery of Sniper Cartridges, (Production Version) in accordance with Annex A-1)	Destination: CFAD Dundurn			Destination: CFAD Angus		
		Option Quantity Range (Number of Units)	Firm Unit Prices	Weighting	Option Quantity Range (Number of Units)	Firm Unit Prices	Weighting
1	For options exercised no earlier than 01 December 2022, and for delivery[1] to the specified destination(s) no later than 01 November 2023	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	0.10 0.25 0.50 0.75 1	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	0.10 0.25 0.50 0.75 1
2	For options exercised no earlier than 01 December 2023, and for delivery[1] to the specified destination(s) no later than 01 November 2024	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	0.10 0.25 0.50 0.75 1	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	0.10 0.25 0.50 0.75 1

[1] **For option(s) exercised, delivery (in full) of the specified number of units to either or both destinations is required within** _____(to be specified by the bidder)_____ , weeks after the option has been exercised by the Contracting Authority.

Total Evaluated Price for Options = Sum of the Evaluated Option Prices for all options deliverable to CFAD Dundurn and for all options deliverable to CFAD Angus, and covering both periods, as specified in Rows 1 and 2 above. Each Evaluated Option Price is calculated as follows:

Evaluated Option Price = Upper Limit of each Option Quantity Range x Proposed Firm Unit Price (for the applicable Option Quantity Range) x Weighting (for the applicable Option Quantity Range)

ATTACHMENT 2 TO PART 3
PRICING SCHEDULE

3) Total Evaluated Price

Table 3.2.3 – Total Evaluated Price

Total Evaluated Price = Sum of the Firm Lot Price from Table 3.2.1 and the Total Evaluated Price for Options from Table 3.2.2.
Total Applicable Taxes = Total Evaluated Price x the Applicable Tax rate
Total Bid Price = Total Evaluated Price + Total Applicable Taxes

4) Price Breakdown

Bidders should provide a breakdown of their proposed firm lot price for performance of the Work detailed in Annex A-1 – Statement of Work, (excluding options). As well, Bidders should provide a breakdown of their proposed firm unit prices for options, as detailed in Item 2 above.

The price breakdowns should be based on the tasks which the Bidder has identified in its Technical Proposal. Each task should be identified within a Work Breakdown Structure, and identified by number and title. The price breakdown should provide an estimate of the cost for each task and a schedule for its completion. Bidders should detail the following elements for each task identified for performance of the Work, as applicable:

(a) Labour : For each individual and (or) labour category to be assigned to the Work, indicate: i) the hourly labour rate, inclusive of overhead and profit; and ii) the estimated number of hours.

(b) Non Labour Costs: Specify estimated non labour costs that are required to complete the Work and provide the pricing basis for each. Canadian Customs Duty must be in accordance with the terms of the resulting Contract. Canadian excise taxes must be included, as applicable.

(c) Materials and Supplies: Identify each category of materials and supplies required to complete the Work and provide the pricing basis for each.

(d) Travel and Living Expenses: Indicate the number and cost of journeys, together with the basis of these costs.

(e) Subcontracts: Identify any proposed subcontractor and provide for each one the same price breakdown information as contained in this article.

(f) Other Direct Charges: Identify any other direct charges anticipated, and provide their pricing basis.

(g) Applicable Taxes: Identify any Applicable Taxes separately.

Bidders should show their forecast monthly expenditures for performance of the Work. The estimated monthly expenditures should be based on the tasks which have been identified in the Technical Proposal.

Should any of the above required price breakdown information not be complete, or not be submitted with the bid, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. In the event that only one responsive bid is received in response to this bid solicitation, failure to comply with the request of the Contracting Authority and meet the price breakdown requirement within the time period specified will render the bid non responsive.

ATTACHMENT 3 to PART 3 OF THE BID SOLICITATION
ELECTRONIC PAYMENT INSTRUMENTS

As indicated in Part 3, Clause 3.1.1, the Bidder must complete the information requested below, to identify which electronic payment instruments are accepted for the payment of invoices.

The Bidder accepts to be paid by any of the following Electronic Payment Instrument(s):

( ) VISA Acquisition Card;

( ) MasterCard Acquisition Card;

( ) Direct Deposit (Domestic and International);

( ) Electronic Data Interchange (EDI);

( ) Wire Transfer (International Only);

( ) Large Value Transfer System (LVTS) (Over $25M)

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

(a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.

(b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

The technical evaluation will be conducted in accordance with Attachment 1 to Part 3 of the bid solicitation.

4.1.1.1 Mandatory Technical Criteria

The Bidder must comply with the following mandatory technical criteria:

- The Bidder must meet of all the mandatory requirements detailed in Column 3 of the Compliance Matrix, included at Annex A of Attachment 1 to Part 3 of the bid solicitation; and,
- The Bidder must provide as part of its bid, (at time of bid closing), all of the required proofs of compliance, as detailed in Column 4 of the Compliance Matrix, included at Annex A of Attachment 1 to Part 3 of the bid solicitation.

Bids which do not meet all mandatory requirements will be declared non responsive.

4.1.2 Financial Evaluation

The price of the bid, including the price of options, will be evaluated as follows:

- in Canadian dollars;
- Applicable Taxes extra;
- Inco Terms 2010 Delivered Duty Paid (DDP) to the destinations specified in Attachment 2 to Part 3 – Pricing Schedule;
- Excise taxes, if applicable, included; and,
- Canadian customs duties in accordance with the terms of the resulting Contract.

4.2 Basis of Selection

SACC Manual Clause A0031T (2010-08-16) – Basis of Selection – Mandatory Technical Criteria

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, if applicable, the Integrity declaration form available on the Forms for the Integrity Regime website (http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html), to be given further consideration in the procurement process.

5.1.2 Additional Certifications required with the Bid

Bidders must submit with their bid, the certification detailed in Annex B of Attachment 1 to Part 3 - Bidder Certification to the Statement of Work and Performance Specifications. Under this certification, the Bidder certifies that its proposed goods and services are in full compliance with:

- Annex A-1 – Statement of Work, and all appendices attached thereto; and,
- Annex A-2 – Performance Specifications, and all appendices attached thereto.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the Ineligibility and Suspension Policy (http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website (https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid list at the time of contract award.

P ART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

There is no security requirement applicable to this Contract.

6.2 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex “A-1”.

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

2010A (2020-05-28), General Conditions: Goods (medium complexity) - apply to and form part of the Contract with the following modifications;

a. Definition of minister is modified as follows:
"Canada", "Crown", "Her Majesty" or "the Government" means Her Majesty the Queen in right of Canada as represented by the Minister of National Defence and any other person duly authorized to act on behalf of that minister or, if applicable, an appropriate minister to whom the Minister of National Defence has delegated his or her powers, duties or functions and any other person duly authorized to act on behalf of that minister.

6.4 Term of Contract

6.4.1 Period of the Contract

1) The period of the Contract is from date of Contract to 30 November 2024 inclusive.

2) All the deliverables must;
- be received at their respective destination(s), and,
- meet all requirements for inspection and acceptance,

in accordance with the terms of the Contract, on or before the applicable dates, as specified in Appendix 1 to Annex A-1 - Statement of Work; (the Contract Data Requirements List). All ammunition deliverables (production version) must be received on or before 01 November 2021.

6.4.2 Optional Goods

The Contractor grants to Canada the irrevocable option(s) to acquire the goods, described at Annex “B” – Basis of Payment, Table B.2, under the same conditions and at the prices stated in the Contract. The option(s) may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment. The Contracting Authority may exercise the option(s) at any time before the expiry of the Contract by sending a written notice to the Contractor.

Canada shall have the right to:
- exercise any of the options more than once (irrespective of options previously exercised); and,
- exercise concurrently, the same or multiple options.

6.4.3 Shipping Instructions

All deliverables must be consigned and delivered to the destination(s) specified in the Contract and delivered:

- Inco Terms 2010 Delivered Duty Paid (DDP) at the destinations, as specified in Annex “B” – Basis of Payment.

Goods deliverable to Canadian Forces (CF) Supply Depots must be by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the Depot Traffic Section at the applicable location(s) specified in Annex “B” – Basis of Payment. The consignee may refuse shipments when prior arrangements have not been made.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: _____
Title: _____
Department of National Defence
DGLEPM/DLP _____
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2

Telephone: ___-___-_____
Facsimile: ___-___-_____
E-mail address: _____

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Technical Authority

The Technical Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: ___-___-_____
Facsimile: ___-___-_____
E-mail address: _____

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.4 Contractor's Representative

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: ___-___-_____
Facsimile: ___-___-_____
E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment

1. In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm lot price, as specified in Annex "B" – Basis of Payment, Table B.1 as follows:
   - Currency – Canadian Dollars;
   - Customs duties in accordance with Clause 6.6.2 – Customs Duties - Contractor Importer;
   - Canadian Excise Taxes, if applicable, are included;
   - INCO Terms 2010 DDP to Destinations; and,
   - Applicable Taxes are extra.

2. For options exercised, and in consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the applicable firm unit prices, as specified in Annex "B" – Basis of Payment, Table B.2 as follows:
   - Currency – Canadian Dollars;
   - Customs duties in accordance with Clause 6.6.2 – Customs Duties - Contractor Importer;
   - Canadian Excise Taxes, if applicable, are included;
   - INCO Terms 2010 DDP to Destinations; and,
   - Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 Customs Duties – Contractor Importer

1. As the goods to be supplied under the Contract are defence supplies, customs duties on importation to Canada may be remitted under the Tariff Item Number 9982.00.00 of the Schedule to the *Customs Tariff*.

2. Remission of customs duties payable may be granted under the Tariff Item Number 9982.00.00 when the total contract value of the defence supplies is C$250,000 or more. This reflects the import value of the goods plus the duty that would be applicable in the absence of the *Customs Tariff*.

3. The Contractor will be responsible for pre-arranging remission on importation or for paying customs duties on importation and applying to Canada Border Services Agency for a refund. The Contractor is also responsible for applying to the Department of National Defence in good time for the certification required by the *Customs Tariff*.

6.6.3 Single Payment

SACC Manual Clause H1000C (2008-05-12), Single Payment

6.6.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

a. Visa Acquisition Card;
b. MasterCard Acquisition Card;
c. Direct Deposit (Domestic and International);
d. Electronic Data Interchange (EDI);
e. Wire Transfer (International Only);
f. Large Value Transfer System (LVTS) (Over $25M)

6.6.5 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed. Each invoice must be supported by a copy of the release documents and any other documents as specified in the Contract.

2. Invoices must be distributed as follows:
   The original and one (1) copy must be forwarded to the following address for certification and payment.

   Name: _____
   Title*:* _____
   Department of National Defence
   DGLEPM/DLP _____
   101 Colonel By Drive
   Ottawa, Ontario
   K1A 0K2

   Telephone: ___-___-_____
   Facsimile: ___-___-_____
   E-mail address: _____

6.7 Certifications and Additional Information

6.7.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.8 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

6.9 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

(a) the Articles of Agreement;
(b) the General conditions 2010A (2020-05-28), Goods (medium complexity);
(c) Annex A-1 – Statement of Work, including its Appendices;
(d) Annex A-2 – Performance Specifications, including its Appendices;
(e) Annex B – Basis of Payment;
(f) Annex C - Ammunition Packaging Marking Instructions;
(g) Annex D - Ammunition Manufacturers Data Card Instructions;
(h) Annex E – Ammunition Manufacturer's Lotting Instructions; and,
(i) the Contractor's bid dated _____, entitled _____, and as clarified on _____.

6.10 Defence Contract

SACC Manual clause A9006C (2012-07-16) Defence Contract

6.11 Excess Goods

SACC Manual clause B7500C (2006-06-16) Excess Goods

6.12 Insurance

SACC Manual clause G1005C (2016-01-28) Insurance - No Specific Requirement

6.13 Liability

The Contractor is liable for any damage caused by the Contractor, its employees, subcontractors, or agents to Canada or any third party. Canada is liable for any damage caused by Canada, its employees or agents to the Contractor or any third party. The Parties agree that no limitation of liability or indemnity provision applies to the Contract unless it is specifically incorporated in full text in the Articles of Agreement. Damage includes any injury to persons (including injury resulting in death) or loss of or damage to property (including real property) caused as a result of or during the performance of the Contract.

6.14 Controlled Goods Program

SACC Manual clause A9131C (2014-11-27), Controlled Goods Program
SACC Manual clause B4060C (2011-05-16), Controlled Goods

6.15 Packaging Requirements

All wood packaging materials used in shipping must conform to the International Standards for Phytosanitary Measures No. 15: Regulation of Wood Packaging Material in International Trade (ISPM 15).

Pertinent additional information on Canada's import and export programs is provided in the following Canadian Food Inspection Agency policy directives:

- D-98-08 - Entry Requirements for Wood Packaging Materials Produced in All Areas Other Than the Continental United States; and,
- D-13-01 – Canadian Heat Treated Wood Products Certification Program (HT Program).

Ammunition Packaging markings must be in accordance with Annex “C” – Ammunition Packaging Marking Instructions.

6.16 Quality Assurance

SACC Manual clause D5545C (2019-05-30), ISO 9001:2015 – Quality Management Systems Requirement (Quality Assurance Code C)

6.17 Release Documents – Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

a) One (1) copy mailed to consignee marked: "Attention: Receipts Officer";

b) Two (2) copies with shipment (in a waterproof envelope) to the consignee;

c) One (1) copy to the Contracting Authority;

d) One (1) copy to:
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A OK2
Attention: the Technical Authority

e) One (1) copy to the Quality Assurance Representative;

f) One (1) copy to the Contractor; and

g) For all non-Canadian contractors, one (1) copy to:
DQA/Contract Administration
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A OK2
E-mail: ContractAdmin.DQA@forces.gc.ca.

6.18 Ammunition Lot Number

Identification of the ammunition lot number must be in accordance with Annex “E” – Ammunition Lotting Instructions

6.19 Ammunition Data Cards

The Contractor must;

a) Prepare the ammunition data cards in accordance with Annex “D” – Ammunition Manufacturer’s Data Card Instructions;
b) Forward the ammunition data cards to the consignee(s) identified in the Contract and to the Technical Authority; and,
c) Annotate the propellant stabilizer content data on the ammunition data cards under Notes - Block 17.

6.20 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or their representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.21 SACC Manual Clauses

1. SACC Manual clause D9002C (2007-11-30), Incomplete Assemblies
2. SACC Manual clause D6010C (2007-11-30), Palletization
3. SACC Manual clause D3010C (2016-01-28), Delivery of Dangerous Goods/Hazardous Products
4. SACC Manual clause D3014C (2007-11-30), Transportation o**f** Delivery of Dangerous Goods/Hazardous Products
5. SACC Manual clause D3015C (2014-09-25), Dangerous Goods/Hazardous Products - Labelling and Packaging Compliance
6. SACC Manual clause D3017C (2014-09-25), Preparation of Delivery – Ammunition and Missiles

6.22 Registration – US Code of Federal Regulations

1. As the item(s) deliverable under the Contract may require transport to the United States of America from Canada, unless not required in accordance with the US 49 Code of Federal Regulations (49 CFR) Part 173.56(h), the item(s) must be registered in accordance with the US 49 CFR Part 171. The item(s) must be assigned an EX number in accordance with US 49 CFR Part 171.8 and classified in accordance with US 49 CFR Part 171.12(a).

2. Unless exempt from registration in accordance with Paragraph 1 above, the Contractor will obtain an EX number directly associated with the specified NATO Stock Number (NSN), for each item deliverable under the Contract. The EX number(s) must not have been previously issued to the US DoD.

3. Requests for EX numbers are to be forwarded to:

Eleanor Lawson
U.S. Department of Transportation
HMS/OHMEA/Approvals
1200 New Jersey Avenues, SE
East Building, 2nd Floor, Rm. E23-443
Washington, DC20590
Tel: (202) 366-3987
Facsimile: (202) 366-3753
Email: approvals@dot.gov

4. The Contractor will provide the classification certificate, or a Manufacturer's Classification Letter, for those items exempt from DoT registration in accordance with US 49 CFR Part 173.56(h), on or before delivery of the item(s) to the Technical Authority. However, delivery will not be delayed if an EX number cannot be obtained prior to the product being delivered. The Contractor will advise the Technical Authority of the circumstances for the delay in obtaining the applicable EX number(s). The Contractor will provide the EX number(s) to the Technical Authority immediately following the number(s) being assigned.

5. If an EX number cannot be provided by the Contractor, all pertinent information such as drawings of components, energetic material description, and percentage use in all compositions will be provided to the Technical Authority through the Contracting Authority.

6. The EX number or Manufacturer's Classification file number will be annotated on the Ammunition Data Card under Notes - Block 17.

6.23 NRCAN - Authorization for Explosives

1. Any explosives including ammunition and fireworks that are to be imported into or manufactured, transported, possessed or used in Canada must appear on the List of Authorized Explosives or be covered by a permit, certificate or special authority issued by the Explosives Regulatory Division of Natural Resources Canada (NRCan). Information concerning applications and requests for Authorization and Classification Certificates can be found at:
https://www.nrcan.gc.ca/science-data/research-centres-labs/canadian-explosives-research-laboratory/9855

Note: Import permits may be delayed if an Authorization and Classification is not already in place.

2. The Contractor shall provide the NRCan Authorization and Classification Certificate for the Contract item(s) on or before delivery of the items to the Technical Authority at the address indicated within the Contract. However, delivery will not be delayed if an Authorization and Classification Certificate cannot be obtained prior to the product being delivered. The Contractor will advise the Technical Authority of the circumstances for the delay in obtaining the Authorization and Classification Certificate. The Contractor will provide the Authorization and Classification Certificate number to the Technical Authority immediately after being assigned.

3. If an Authorization and Classification Certificate cannot be provided by the Contractor all mandatory information as required by NRCan to obtain an Authorization and Classification Certificate such as drawings of components, energetic material description and percentage use in all compositions and packaging and labeling will be provided to the Technical Authority through the Contracting Authority.

4. The Authorization and Classification Certificate number will be annotated on the Ammunition Data Card under Notes/Remarks, Block 17.

5. The Contractor must provide to the DND Technical Authority a copy of the NRCan Authorization and Classification Certificate for the Contract item(s) to have on file.

6.24 Approval Documents and Export Licenses

Within seven (7) days after the Date of Contract, the Contractor must apply for all required Governmental and other regulatory permits, necessary for performance of the Work. This includes, but is not limited to applications for export licenses, Canadian end-user certificates, Canadian international import certificates, and, or annual explosive importation permits, if applicable. The Contractor must provide to the Contracting Authority, a copy of each application submitted, within seven (7) days of the respective date of application. Furthermore, upon request, the Contractor must provide to the Contracting Authority copies of all available documentation from the applicable Governmental and regulatory authorities advising on the status of the application(s) submitted. This information must be provided within two (2) weeks of the Contracting Authority's request.

List of Annexes and Appendices to Part 6 - Resulting Contract:

Annex A-1 – Statement of Work, including its Appendices
- Appendix 1 – Contract Data Requirements List
- Appendix 2 – Data Item Descriptions

Annex A-2 – Performance Specifications, including its Appendices
- Appendix 1 – System Acceptance Test
- Appendix 2 – S3 Sequential Test Requirements
- Appendix 3 – S3 Non-Sequential Test Requirements

Annex B – Basis of Payment;
Annex C - Ammunition Packaging Marking Instructions
Annex D - Ammunition Manufacturers Data Card Instructions
Annex E – Ammunition Manufacturer’s Lotting Instructions

The following documents are to be inserted into the bid solicitation at this part of the document.

Annex A-1 – Statement of Work, including its Appendices
- Appendix 1 – Contract Data Requirements List
- Appendix 2 – Data Item Descriptions

and

Annex A-2 – Performance Specifications, including its Appendices
- Appendix 1 – System Acceptance Test
- Appendix 2 – S3 Sequential Test Requirements
- Appendix 3 – S3 Non-Sequential Test Requirements

Annex B – Basis of Payment

1. For the satisfactory performance of all the Work detailed in Annex A-1 – Statement of Work, including all of its Appendices and Annexes, but excluding options, the Contractor will be paid the Firm Lot Price, as follows:

Table B.1

Item	Description	Controlled Goods (CTAT or ITAR)	Security Requirement	Quality Assurance Code	Firm Lot Price	Delivery[1] (No Later Than)
1	Performance of all the Work detailed in Annex A-1 to Part 6 – Statement of Work, including all of its Appendices and Annexes, but excluding options. and, Delivery of .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridges (Production Version in accordance with Annex A-1) to Canadian Forces Ammunition Depot (CFAD) Angus, CFAD Dundurn, and CFB Valcartier) as follows: CFAD Angus – 4,000 Units CFAD Dundurn -- 6,000 Units CFAD Valcartier – 9,000 Units	Yes	**No**	**C**	$ _____	30 November 2021

Destination Addresses **The destination addresses for cartridge deliverables are:**			**Invoicing Address** **The address to which invoices are to be sent is:**
CFAD Angus W2493 Borden, Ontario L0M 1C0 Canada ATTN: _____ ICS Supervisor Tel: (705) 424-1200 Ext:_____ Fax: (705) 423-_____ E-mail: _____	CFB Valcartier W0106 Courcelette, Quebec G0A 4Z0 Canada ATTN: _____ , Ammunition Technician Tel: (418)844-5000 Ext:_____ Fax: (418) 844-_____ E-mail: _____	CFAD Dundurn W1955 Dundurn, Saskatchewan S0K 1K0 Canada ATTN: _____ Inventory Control Section Tel: (306) 492-2135 Ext: _____ Fax: (306) 492-_____ **E-mail: _____**	Department of National Defence Directorate of Land Procurement DLP _____ DGLEPM/DLP Address: 101 Colonel By Drive, Ottawa, Ontario K1A 0K2 Phone: 819-939-_____ E-mail: _____@forces.gc.ca

Annex B – Basis of Payment

1. (continued)

Table B.1 (continued)

Destination Addresses **The destination address for CDRL deliverables is:**	Terms: [1] The Delivery Date specified above is the date by which all Work is required to be performed, and, or delivered to the destinations, and meet the requirements of the Contract. The required delivery dates for individual CDRL items are detailed in Annex A-1 to Part 6 – Statement of Work, Appendix 1 – Contract Deliverable Requirements List. The required delivery date for all production version sniper cartridges to all destinations is 01 November 2021. All work must be delivered by 30 November 2021. The Date of Contract is shown on Page 1 of the Contract and represents the date of Contract award.
DSSPM 9 Project Manager – PMO Sniper Systems National Defence Headquarters MGen George R Pearkes Building 101 Colonel By Drive Ottawa, Ontario K1A 0K2	

Annex B – Basis of Payment

2. Options

For the satisfactory performance of Options that may be exercised by Canada, the Contractor will be paid the firm unit prices as follows:

Table B.2

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Work Description/Period	Option Quantity Range (Number of Units)	Destination and Firm Unit Prices	Destination and Firm Unit Prices	**Controlled Goods** (CTAT or ITAR)	Security Requirement	Quality Assurance Code
Options for the delivery of .338 Lapua Magnum API Sniper Cartridges, (Production Version in accordance with Annex A-1) within the following periods.		CFAD Dundurn	CFAD Angus	Yes	No	C
For options exercised no earlier than 01 December 2022, and for Delivery[1] to the specified destination(s) no later than 01 November 2023	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____			
For options exercised no earlier than 01 December 2023, and for Delivery[1] to the specified destination(s) no later than 01 November 2024	1 to 5,000 5,001 to 10,000 10,001 to 15,000 15,001 to 20,000 20,001 to 25,000	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____	$CAD _____ $CAD _____ $CAD _____ $CAD _____ $CAD _____			

Destination Address:

1 The destination address for CFAD Dundurn is:

CFAD Dundurn W1955
Dundurn, Saskatchewan
S0K 1K0
Canada — Tel: (306) 492-2135 Ext: _____
ATTN: _____ — Fax: (306) 492-_____
Inventory Control Section — E-mail: _____

Destination Address:

2 The destination address for CFAD Angus is:

CFAD Angus W2493
Borden, Ontario
L0M 1C0
Canada — Tel: (705) 424-1200 Ext:_____
ATTN: _____ — Fax: (705) 423-_____
ICS Supervisor — E-mail: _____

[1] ***For option(s) exercised, delivery (in full) of the specified number of units to either or both destinations is required within _____(to be specified by the bidder)_____ , weeks after the option has been exercised.***

Annex C – Ammunition Package Marking Instructions - Small Arms Ammunition

ITEM	DESCRIPTION
1	PROPER SHIPPING NAME AND UN NUMBER
2	EXPLOSIVE HAZARD LABEL (MIN SIZE 30MM X 30MM, MAX SIZE 100MM X 100MM)
3	NATO STOCK NUMBER
4	PACKAGE QUANTITY
5	DESCRIPTIVE NOMENCLATURE OF STORE AND SYMBOLS
6	NET WEIGHT OF EXPLOSIVES (AIR TPT) (TO TWO DECIMAL PLACES)
7	GROSS WEIGHT IN KILOS (TO ONE DECIMAL PLACE)
8	NET EXPLOSIVE QUANTITY (TO TWO DECIMAL PLACES)
9	SHIPPING CUBE IN METRES (TO THREE DECIMAL PLACES)
10	LOT NUMBER TO BE UNDERLINED. WORD “LOT” NOT TO BE SHOWN
11	UN PACKAGING SYMBOL AND CODES (TP 14850)

SAMPLE OF MARKING PLACEMENT

LEFT SIDE OF BOX	FRONT OF BOX
XXXXXXXXXXXXXX (ITEM 10)	(ITEM 1) (ITEM 2) NOTE 4 XXXX XX XXX XXXX (ITEM 3) XXX XXXXXXXXXXXXX (ITEMS 4 ET 5) NET QTY 0.00 KG (ITEM 6) GR WT 0.0 KG (ITEM 7) NEQ 0.00 KG (ITEM 8) XXXXXXXXXX (ITEM 10) CU 0.000 M3 (ITEM 9) XXXXXXXXXXXXX (ITEM 11)

NOTES:
1. CHARACTERS ARE TO BE VERTICAL COMMERCIAL FULL GOTHIC TYPE AND MUST BE FULL-TONED WITH SHARP CLEAR OUTLINE.
2. CHARACTER SIZE TO SUIT COMMERCIAL EQUIPMENT PRACTICE AND THE SPACE AVAILABLE. THE POSITION OF THE MARKINGS ARE TO BE AS SHOWN IN THE SAMPLE ABOVE.
3. LOCATE MARKINGS WITH SUFFICIENT CLEAR SPACE AT SEALING STRAP LOCATIONS SO THAT MARKINGS ARE NOT OBSCURED
4. LABELS TO BE IN ACCORDANCE WITH THE U.N. RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS MODEL REGULATIONS

Annex D - Ammunition Manufacturer's Data Card Instructions

Scope

1. This Annex covers Ammunition Manufacturer's Data Card instructions.

General

2. A blank Ammunition Manufacturer's Data Card is shown at Figure A-1. Each block of the Ammunition Manufacturer's Data Card is numbered. The following paragraphs detail the information to be entered in each block:

   a. **Block 1 – Net Quantity.** The quantity to be shown here is the quantity available for shipment and excludes the quantity expended in tests.

   b. **Block 2 – Lot Number.** Insert the complete ammunition lot number (or serial number of an item which is not lotted) of the item(s) represented by the Ammunition Manufacturer's Data Card. Only items that have lot or serial numbers shall be listed on the card.

   c. **Block 3 – Stock Number.** Enter the item stock number as determined from the technical data list or from the contract.

   d. **Block 4 – Nominal Initial Velocity at Proof.** If applicable, enter the nominal initial velocity determined at the time of proof.

   e. **Block 5 – Item Nomenclature.** Show the exact standard nomenclature as given in the technical data list or on the top drawing for the item.

   f. **Block 6 – Packaging Description.** Enter the method by which the items are packed for shipment, including the number of items, parts or sets in each outer container. Standard abbreviations may be used.

      (1) For transit packs between contractors, insert the word "transit" and include a general description of the packing method.

      EXAMPLE

      Transit – 1 assembly/cardboard container; 24 cardboard containers / wooden box.

      (2) For items covered by a packing and marking drawing, include the drawing number.

      EXAMPLE

      1 cartridge/fibre container; 1 fibre container / metal container; 4 metal containers / wooden box; 8796522.

   g. **Block 7 – Manufacturer.** Enter the manufacturer's name as given in the contract.

   h. **Block 8 – Technical References.** Enter the number and the revision date of the top drawing and/or the specification used to manufacture the item.

   i. **Block 9 – Contract Number(s).** Enter the number of the contract issued by Public Works and Government Services Canada.

Annex D - Ammunition Manufacturer's Data Card Instructions

j. **Block 10 – Component Details.** The following are applicable:

1) **Component.** Give the approved name of the component.

2) **Model.** Enter the mark or model number of the component.

3) **Drawing.** Enter the number of the top drawing or specification under which the component was manufactured.

4) **Manufacturer.** Give the full name of the manufacturer of each lot used of the component.

5) **Date.** Enter the date of manufacture of the component.

6) **Lot Number.** Give the complete number of each lot of each component.

7) **Quantity.** When components from more than one lot are used, give the quantity of each.

k. **Block 11 – Number of Packs.** Enter the number of outer packages in which the net quantity (Block 1) is packed.

l. **Block 12 – Total Lot Quantity.** Enter total quantity produced of the lot number given in Block 10. This will be the same number as that given in Block 1 if the entire lot is shipped as one unit. If more than one data card is prepared for a lot (as in the case of a data card accompanying partial lot shipments), this will be the sum of the net quantities given in the Block 1.

m. **Block 13 – Hazard Classification Code (HCC).** Enter the Hazard Classification Code (including the compatibility code) determined in accordance with ST/SG/AC.10/11, Recommendations on the Transportation of Dangerous Goods, Tests and Criteria.

n. **Block 14 – Net Explosive Content (NEC) of Item.** Enter the net explosive content of the item named in Block 5.

o. **Block 15 – Transport (Tpt) Canada or UN Package Number.** Enter the number assigned to the item container by Transport Canada or the equivalent organization of the nation of origin of the container.

p. **Block 16 – UN Number and Proper Shipping Name.** Enter the UN number and proper shipping name determined in accordance with ST/SG/AC.10/11, Recommendations on the Transportation of Dangerous Goods, Tests and Criteria.

q. **Block 17 – Notes.** Any unusual features of the lot represented by the data card will be reported and identified by the appropriate symbol as follows:

i. Changes in process will be listed following a single asterisk (*). These include changes in location, equipment, manufacturing methods, materiel or inspection methods. Since changes of this type are usually of a permanent nature, notations need to be made for the first lot affected; the note will be interpreted as applying until further notation is made.

ii. Technical data changes (design changes, deviations, waivers and concessions) applying to drawings or specifications will be listed following a double asterisk (**). Report the Design Authority Serial Number of the applicable Design Change/Deviation form (DND 672), the name of the item or component involved, the extent of the change to the technical data and the method of identifying the packs containing items manufactured in accordance with the revised data.

Annex D - Ammunition Manufacturer's Data Card Instructions

iii. Unusual occurrences and difficulties in manufacture will be listed following a triple asterisk (***). Any conditions which are out of the ordinary, excessive rejections owing to poor materiel or improper processing and any other unusual circumstances related to loading, assembly, packing or inspection shall be reported.

iv. Other notes regarding palletization of the lot (or part lot) being shipped may be added if appropriate.

r. **Block 18 – Inspector's Name.** Enter the name of the contractor's inspector responsible for the correctness of the information appearing on the data card.

s. **Block 19 – Signature.** This block shall be signed by the person whose name appears in Block 18.

t. **Block 20 – Date.** Enter the date of the signature of the data card.

<table>
<tr><td colspan="3">Department of National Defence
Ministère de la Défense Nationale</td><td colspan="3">Ammunition Manufacturer's Data Card
Fiche de fabricant de munitions</td></tr>
<tr><td>1. Net Qty
Qté nette</td><td>2. Lot No.
N° de lot</td><td colspan="2">3. Stock No.
N° de catalogue</td><td colspan="2">4. Nominal Initial Velocity at Proof
Vitesse initiale nominale à l'essai</td></tr>
<tr><td colspan="3">5. Item Nomenclature
Désignation de l'article</td><td colspan="3">6. Packaging Description
Description de l'emballage</td></tr>
<tr><td colspan="2">7. Manufacturer
Fabricant</td><td colspan="2">8. Technical References (Dwg No. and Date)
Documents techniques (N° de dessin et date)</td><td colspan="2">9. Contact Number(s)
Numéro(s) de contrat</td></tr>
<tr><td>10. Component and Model
Composant et n° de modèle</td><td>Drawing
N° de dessin</td><td>Manufacturer
Fabricant</td><td>Date
Date</td><td>Lot Number
N° de lot</td><td>Quantity
Quantité</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>11. No. of Packs
N° d'emballages</td><td colspan="2">12. Total Lot Qty
Qté totale du lot</td><td>13. HCC
CCR</td><td colspan="2">14. NEC/Item
CNE de l'article</td></tr>
<tr><td colspan="3">15. Tpt Canada/UN Package No.
N° d'emballage TC/ONU</td><td colspan="3">16. UN No. and Proper Shipping Name
N° ONU et désignation exacte de l'expédition</td></tr>
<tr><td colspan="6">17. Notes
Remarques</td></tr>
<tr><td colspan="2">18. Inspector's Name
Nom de l'inspecteur</td><td colspan="3">19. Signature</td><td>20. Date</td></tr>
</table>

Figure A-1

Annex E – Ammunition Manufacturer's Lotting Instructions

1. Description of the Standard Lot Number

The ammunition lot number shall consist of a manufacturer's identification symbol, a numeric code showing the year of production, an alpha code representing the month of production, a lot interfix number followed by a hyphen, a lot sequence number. The ammunition lot number shall not exceed twelve characters in length and characters shall not be separated by spaces. The minimum number of characters used shall be eleven. If a one or two character manufacturer's identification symbol is used, the remaining positions of the three-character field shall be filled by dashes (-) (e.g. A--, AB-). The following illustrates the construction of an ammunition lot number:

ABC96A01-02

a. "ABC" reflects the manufacturer's identification symbol;
b. "96" is a two-digit numeric code identifying the year of production;
c. "A" is a single-alpha code signifying the month of production;
d. "01" is the Lot interfix number; and
e. "02" is the Lot sequence number.

2. Manufacturer's Identification Symbol

Manufacturer's identification symbols shall be all capital letters and shall not exceed three-alpha characters. This symbol is an integral part of the ammunition lot number. It is used to identify the facility, which manufactured, assembled, loaded, modified or overhauled the specific lot of ammunition.

3. Year of Production

Each ammunition lot number shall have the year of production inserted after the manufacturer's identification symbol. The year of production is a two-digit code represented by the last two numbers of the year in which work on the lot was initiated. It becomes an integral part of the ammunition lot number. There are no spaces between the manufacturer's identification symbol, the year of production code and the alpha code used to identify the month of production.

4. Month of Production

Each ammunition lot number shall have the month of production code inserted after the two-digit code identifying the year of production. The month of production is a single capital letter assigned as follows:

MONTH	CODE	MONTH	CODE	MONTH	CODE	MONTH	CODE
January	A	February	B	March	C	April	D
May	E	June	F	July	G	August	H
September	J	October	K	November	L	December	M

The code reflects the month of the year in which work on the lot was initiated. There are no spaces between the year of production code, the month of production code and the first digit of the lot interfix number.

Annex E – Ammunition Manufacturer's Lotting Instructions

5. Lot Interfix Number

Each ammunition lot number shall have assigned a two-digit interfix number that shall commence with "0l" and which shall not exceed "99". The interfix number is an integral part of the ammunition lot number and is intended to identify those lots in an interfix series which have been produced by the same manufacturer at the same location for the same item, mate according to a specific design and manufacturing process using like materials in accordance with certain administrative procedures. The interfix number will usually start with "0l" and it shall appear immediately after the month of production code with no space. Once a manufacturer has produced a lot of an ammunition item and the interfix for that item has progressed beyond
"0l", his interfix number shall never revert to "0l". A change in the month of production does not necessitate the lot interfix number or the lot sequence number to revert to 0l.

6. Lot Sequence Number

The two-digit lot sequence number identifies a lot according to its sequence of production within each lot interfix number. A sequence number shall be assigned to each lot produced. The lot sequence numbers within each interfix shall always begin with "01" and continue in sequence until production of the item is terminated or until a change is made in the item or its production which requires a sequence number beyond "99", or until a change in contract is made.

7. Manufacturer's Responsibility

Each lot of ammunition (components, ammunition items of issue, or explosives) shall have a lot number assigned at the time of manufacture or assembly, regardless of the ultimate disposition of the lot. It shall be the responsibility of the manufacturer to ensure that each lot of ammunition is assigned a lot number. Furthermore, the manufacturer shall ensure that all elements which comprise the lot number (manufacturer's symbol, interfix number, etc.) are correctly assigned.

8. Marking of Ammunition and Components

NOTE: Due to size limitations, Small Arms Ammunition of all calibres less than 20mm need not be marked with the ammunition lot number.

Each ammunition item and each component shall be identified by an ammunition lot number that shall appear on the item itself. The location and method of marking of the lot number is at the discretion of the manufacturer. The word "LOT" shall not appear on the ammunition.

ANNEX A-1

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

STATEMENT OF WORK

Reference Number: W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
National Defence Headquarters
Major General George R. Pearkes Building
Ottawa, Ontario
K1A 0K2

NOTICE
This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

CONTENTS

1 Scope

1.1 Purpose

1.1.1 The requirement is for the production and delivery of .338 Lapua Magnum Armour Piercing Incendiary sniper ammunition. The ammunition is for use with the Canadian Armed Forces (CAF) .338 Lapua Magnum compatible weapon system(s). Under the resulting contract, the successful contractor will support DND in the qualification of the proposed ammunition for its:

a. Safety and Suitability for Service (S3) assessment;

b. Article 36 Legal Review;

c. Environmental and Occupational Health and Safety Assessment;

d. Type Classification; and,

e. Associated Logistic, System Engineering, and Program Management Requirements.

1.1.2 The required support comes in the form of specific contract data deliverables identified in this document and other services that include any required failure investigations, risk mitigation measures, engineering change management and responding to technical questions. The Contractor will also be required to chair virtual meetings on an as required basis utilizing teleconferencing technologies.

1.1.3 The ammunition must be compliant to the Commission internationale permanente pour l'épreuve des armes à feu portatives (CIP) standard. Deliverables include the provision of technical information and data, including Integrated Logistics Support (ILS) related data, required to bring the Sniper Cartridge into service and authorized for CAF transport and use. All documentation deliverables must be delivered by 31 March 2021.

1.1.4 A quantity of 19,000 cartridges will be deliverable to the CAF on or before 01 March 2021. Options for up to an additional 50,000 cartridges will be deliverable in each of Government fiscal years 2022/23 and 2023/24.

1.1.5 The requirement is detailed in:

a. Annex A-1 to Part 6 – Statement of Work, including the following Appendices:

i. Appendix 1 – Contract Deliverable Requirements List

ii. Appendix 2 – Data Item Description

b. Annex A-2 to Part 6 – Performance Specifications, including the following Appendices:

i. Appendix 1 – System Acceptance Test

ii. Appendix 2 – S3 Sequential Test Requirements

iii. Appendix 3 – S3 Non-Sequential Test Requirements

1.2 Background

1.2.1 The Sniper Cartridge will provide enhanced anti-materiel capability to CAF .338 Lapua Magnum chambered sniper weapons (Sniper Weapons) while continuing to adhere to Canada's commitment to its treaties and other obligations under International Humanitarian Law.

2 Acronyms

ANSI/EIA	American National Standards Institute / Electronic Industries Alliance
ASSB	Ammunition Safety and Suitability Board
AETIP	Ammunition and Explosive Technical Information Publication
CAF	Canadian Armed Forces
CDRL	Contract Data Requirements List
CD-ROM	Compact Disc-Read Only Memory
CIP	Commission internationale permanente pour l'épreuve des armes à feu portatives (Permanent International Commission for the Proof of Small Arms)
CPB	Canadian Product Baseline
DAEME	Director Ammunition and Explosives Management and Engineering
DID	Data Item Description
DLP	Director Land Procurement
DND	Department of National Defence
DOT	Department of Transportation
DSSPM	Director Soldier Systems Program Management
ECP	Engineering Change Proposal
EOHSIR-A&E	Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives
FAT	First Article Test
IAW	In Accordance With
ILS	Integrated Logistic Support
ISO	International Standards Organization
LAT	Lot Acceptance Test
MSDS	Material Safety Data Sheet
NRCAN	Natural Resources Canada
PCO	Project Control Officer
QA	Quality Assurance
QATA	Qualified Ammunition Technical Authority
S3	Safety and Suitability for Service
SAT	System Acceptance Testing
SEM	System Engineering Management
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Documentation
TDP	Technical Data Package

UN	United Nations
US	United States

3 Terminology

3.1 “Article 36 Legal Review” refers to a review that is conducted by the Directorate of International and Operational Law to ensure that CAF weapon systems comply with those limits imposed by international laws and conventions to which Canada is a signatory. DIOL is an organization within the Department of National Defence (DND) and the conduct of an Article 36 Review is a legal requirement.

3.2 “Ammunition Safety and Suitability Board (ASSB)” refers to the authority within the DND for recommending ammunition and explosives as safe and suitable for service.

3.3 “ASSB Phase 1 Decision Document.” A Phase 1 Decision Document is used to assess whether the S3 test program proposed for a new munition is appropriate and complete with respect to the declared service life cycle.

3.4 “ASSB Phase 2 Decision Document.” A Phase 2 Decision Document is used to assess the S3 of a new munition with respect to the declared service life cycle. If the munition is found safe and suitable, the Phase 2 Decision may also make recommendations for conditions of service.

3.5 “Baseline Documentation” consists of the following pre-production and Integrated Logistic Support (ILS) deliverables:

a. Technical Specification;

b. Technical Data Package (TDP);

c. Hazard Classification certifications from Natural Resources Canada (NRCAN) and the United States (US) Department of Transportation (DOT);

d. Material Safety Data Sheet (MSDS);

e. Supplementary Provisioning Technical Documentation (SPTD)

f. Logistic Data Sheet; and

g. Ballistic Support Documentation.

3.6 “Canadian Product Baseline (CPB)” is defined as the production ready configuration of the Sniper Cartridge achieved through Canada’s acceptance of all pre-production and applicable ILS deliverables under the contract known collectively as the Baseline Documentation. Once approved, changes to the CPB can only be made through the preparation and approval of change documentation. All Sniper Cartridges produced for testing, trials and final delivery must conform to the CPB.

3.7 “CDRL” are a list of authorized data requirements for this procurement that form a

part of the contract. CDRLs detail delivery requirements for paper and electronic based data deliverables. CDRLs and DIDs are closely related and inter-referenced documents.

3.8 “DIDs” provide additional details on the content and format of the referenced CDRL.

3.9 “Lot” means a quantity of ammunition that is manufactured or assembled by one producer under uniform conditions that is expected to function in a uniform manner. An ammunition lot is designated and identified by assignment of an ammunition lot number. Materiel comprising an ammunition lot must be homogeneous.

3.10 “Performance Specification” means the .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge performance specifications as described in Annex A-2 and associated appendices.

3.11 “Phase 2 Supporting Data” is defined as the data and information provided/generated in response to the ASSB Phase 1 Decision Document test plan. The Phase 2 Supporting Data is, in part, used to generate the ASSB Phase 2 Supporting Document.

3.12 “Production Sniper Cartridges” means the cartridges produced following the establishment of the CPB.

3.13 “Qualified Ammunition Technical Authority (QATA)” is an appointed individual with specialist training and experience in ammunition design. The QATA is responsible for conducting safety and suitability assessments of ammunition and explosives.

3.14 “Serial Lots” means the Production lots produced following successful First Article Test (FAT). These lots are subject to Lot Acceptance Testing (LAT).

3.15 “Sniper Cartridge” means the CIP compliant .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge to be produced and delivered by the Contactor under this contract In Accordance With (IAW) the established Canadian Product Baseline (CPB) and performance specification.

3.16 “Sniper Weapon” means current and future CAF .338 Lapua Magnum small arms weapon platforms that are CIP compliant in terms of pressure, chamber dimensions and head spacing.

3.17 “Technical Data Package” means the customized Technical Data Package delivered by the Contactor to Canada that contains engineering drawings for the Sniper Cartridge down to its sub-component level, packaging, palletization, weights, dimensions, marking information and sources of supply.

3.18 “Technical Letter” is a formal document approved by Director Ammunition and Explosives Management and Engineering (DAEME) to assess the safety and suitability with respect to the use of non DND/CAF ammunition in tests, trials and demonstrations conducted on DND property or by DND/CAF personnel. A signed Technical Letter must be provided to the Range Safety Officer prior to the ammunition being fired.

3.19 “Type Classification” is the formal process of endorsing the technical compliance of ammunition or explosives for CAF service use.

3.20 “Working Days” means Monday to Friday excluding Federal statutory holidays as observed by DND.

4 Security

4.1 All work performed and documentation prepared by the Contractor must be unclassified.

5 Applicable Documents

5.1 Commercially Available Documents

a. ANSI/EIA-649B – National Consensus Standard for Configuration Management https://www.sae.org/standards/content/eia649b/; and

b. International Organization for Standardization (ISO) 2859-1 – Sampling Procedures for Inspection by Attributes https://www.iso.org/obp/ui/#iso:std:iso:28598:-1:ed-1:v1:en;

5.2 Government Supplied Documents

a. D-02-006-008/SG-001: National Defence Standard, The Design Change, Deviation and Waiver Procedure; and

b. D-09-002-009/SG-000: Standard Procedures for the Type Classification of Ammunition and Explosives.

6 Overview

6.1 General

6.1.1 The Contractor must be responsible for conducting conventional Project Management, System Engineering Management, ILS Management and Quality Assurance (QA) activities in support of pre-production, production and delivery of the Sniper Cartridge.

6.1.2 This SOW consists of data deliverables, in the form of Contract Data Requirements Lists (CDRLs) and ammunition deliverables. A full description of the data and ammunition delivery requirements are located in section 11 of this document.

6.2 Pre-Production Overview

6.2.1 General

6.2.1.1 The Contractor must be responsible for delivering technical information and data, including ILS related data, required to bring the Sniper Cartridge into service and authorized for CAF transport and use.

6.2.2 Establishing a Product Baseline

6.2.2.1 The Contractor must be responsible for establishing and maintaining the CPB for the Sniper Cartridge for the duration of the contract.

6.2.2.2 The CPB must be established prior to the production and delivery of the Sniper Cartridges.

6.2.2.3 Changes to the CPB must only be made through the preparation and approval of change documentation.

6.3 Production Overview

6.3.1 General

6.3.1.1 The Contractor must be responsible for producing and delivering Sniper cartridges IAW the approved CPB and contract.

6.3.1.2 The Contractor must produce additional cartridges to account for FAT and LAT activities.

6.3.2 System Acceptance Testing (SAT) and Safety & Suitability for Service (S3) Assessments

6.3.2.1 Canada will be responsible for conducting SAT and S3 assessments based on the requirements found in the Performance Specification (Annex A-2) and its appendices.

6.3.2.2 The Sniper Cartridge must successfully pass SAT prior to S3 assessments being conducted.

6.3.2.3 The Contractor must provide support to this effort including the provision of technical data, failure investigations and S3 risk mitigation measures on an as required basis.

6.3.2.4 Production Sniper Cartridges delivered against the contract will be used for SAT and S3 testing.

7 Pre-Production Requirements

7.1 ASSB Technical Letter Data

7.1.1 An ASSB Technical Letter is required if the Sniper Cartridge is to be fired by CAF personnel or fired on DND ranges during tests, trials or demonstrations.

7.1.2 The Contractor must provide ASSB Technical Letter Data in support of an ASSB Technical Letter IAW CDRL 001 and Data Item Description (DID) ASSB-001.

7.2 ASSB Phase 2 Decision Document

7.2.1 The Contractor must review the ASSB Phase 1 Sequential and non-Sequential test requirements (Annex A-2, Appendices 2 and 3) and provide all available information and test data in support of the S3 assessment (Phase 2 Supporting Data).

7.2.2 The Phase 2 Supporting Data will be used to develop the ASSB Phase 2 Decision Document and for DND to perform a gap analysis to identify additional or incomplete testing that needs to be conducted to satisfy the S3 requirements identified at Annex A-2, Appendices 2 and 3. The Phase 2 Supporting Data must be submitted IAW CDRL 002 and DID ASSB-002.

7.3 Technical Specification

7.3.1 The Contractor must prepare and deliver a Technical Specification IAW CDRL 003 and DID PREP-001.

7.3.2 The Technical Specification must incorporate the Performance Specification (Annex A-2) and Contractor technical requirements.

7.3.3 This document must form the basis for all verification and QA activities including FAT (if applicable) and LAT.

7.3.4 The Technical Specification must detail the applicable FAT and LAT plans, procedures and sentencing criteria.

7.3.5 The Contractor must not perform FAT (if applicable) or LAT until the Technical Specification has been approved by Canada.

7.4 Technical Data Package (TDP)

7.4.1 The Contractor must prepare and deliver a Sniper Cartridge TDP IAW CDRL 004 and DID PREP-002.

7.4.2 Throughout the course of the contract, the Contractor must maintain the TDP, incorporating engineering changes throughout the period of the contract.

7.5 United Nations (UN) Hazard Classification Certificates

7.5.1 Natural Resources Canada (NRCAN)

7.5.1.1 In conjunction with the delivery of the TDP, the Contractor must obtain and deliver a copy of the Sniper Cartridge UN Hazard Classification Certificate issued from the NRCAN Chief Inspector of Explosives IAW CDRL 005 and DID PREP-003.

7.5.2 United States Department of Transportation

7.5.2.1 In conjunction with the delivery of the TDP, the Contractor must obtain and deliver a copy of the Sniper Cartridge UN Hazard Classification Certificate issued from the US Department of transportation (DOT) IAW CDRL 006 and DID PREP-004.

7.6 Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR - A&E)

7.6.1 The EOHSIR–A&E forms part of the final ASSB Phase 2 Decision Document. The Contractor must submit an EOHSIR–A&E IAW CDRL 007 and DID PREP-005.

7.7 Canadian Product Baseline (CPB)

7.7.1 The CPB must be established when the Baseline Documentation, as defined above (See terminology), has been submitted and approved by Canada. The CPB consists of both pre-production and ILS deliverables.

7.7.2 Once the CPB is established, changes to the supporting documentation must be made IAW the engineering change proposal process detailed in section 8.2.

8 Production Requirements

8.1 General

8.1.1 The Contractor must manufacture and deliver Sniper Cartridges that meet the DND approved CPB.

8.2 Configuration Management Procedures

8.2.1 Change Control

8.2.1.1 The Contractor must implement change control procedures for the duration of the contract and use the forms for Engineering Change Proposals (ECPs) IAW DND Standard D-02-006-008/SG-001 National Defence Standard, The Design Change, Deviation and Waiver Procedure.

8.2.1.2 The Contractor must not change or modify items or components defined by the approved CPB without an ECP approved by Canada.

8.2.2 Engineering Change Proposal

8.2.2.1 The Contractor must prepare and deliver ECPs IAW CDRL 008 and DID PROD-001 to request a design change.

8.2.2.2 All ECPs are classified as Class 1 or Class 2. If the ECP affects form, fit, function, cost, schedule or other factors defined in ANSI/EIA-649B as major changes, the change is classified as Class 1; otherwise it is classified as Class 2 (a minor change). A Class 1 classification requires the approval of Canada, whereas a Contractor may proceed with a Class 2 classification and notify Canada accordingly by submitting the ECP. If there is doubt as to whether an ECP is Class 1 or 2, the Contractor must contact Canada for clarification.

8.2.2.3 A revised Technical Data Package must be submitted with all ECPs that reflects the proposed change.

8.2.3 Request for Deviation

8.2.3.1 The Contractor must prepare and deliver Request for Deviations IAW CDRL 009 and DID PROD-002 when the Contractor determines, prior to manufacture of items, that it is not possible to satisfy the requirements of the CPB.

8.2.4 Request for Waiver

8.2.4.1 The Contractor must prepare and deliver Request For Waivers IAW CDRL 010 and DID PROD-003 when the Contractor determines either during or after manufacture of items, that the items do not meet specified requirements but

are suitable for use “as is” or after rework or retrofit by an approved method.

8.3 Marking and Colour of Sniper Cartridges and Associated Packaging

8.3.1 All identification markings must be IAW the approved CPB.

8.4 Packaging and Palletization

8.4.1 The Contractor must package the Sniper Cartridges IAW the DND approve CPB.

8.5 First Article Test (FAT)

8.5.1 Conduct

8.5.1.1 The FAT is used to confirm that the Sniper Cartridge design can be manufactured to the standard required for production. The Contractor must ensure that the Sniper Cartridge will maintain the required level of safety and suitability while meeting the approved Technical Specification (CDRL 003) and FAT criteria.

8.5.1.2 The Contractor must plan, coordinate, manage and conduct the FAT IAW the FAT criteria detailed in the approved Technical Specification during the following events:

a. At the commencement of a new production line (Pilot Lot);

b. If an existing production line has been restarted after a shutdown of greater than twelve (12) months; or

c. Following the rejection of a lot.

8.5.1.3 If applicable, the Contractor must conduct a FAT on the Pilot Lot IAW the FAT criteria detailed in the approved Technical Specification and IAW with Part 5 of D-09-002-009/SG-000.

8.5.1.4 If a FAT is required, the Contractor must perform FAT on a sample size determined IAW ISO 2859-1 and part 4 (Testing) of D-09-002-009/SG-000.

8.5.1.5 If a FAT is required, the Contractor must give Canada 10 days advance notice prior to commencing FAT. Canada must be given access to witness all FAT activities.

8.5.2 FAT Report

8.5.2.1 If a FAT is required, the Contractor must prepare and deliver a FAT Report, IAW CDRL 011 and DID PROD-004.

8.5.2.2 If it is determined that a FAT is not required, the Contractor must submit to Canada a report on the last FAT that was conducted.

8.5.2.3 The Contractor must not start to manufacture production lots (Serial Lots) for delivery until the FAT results have been accepted by Canada.

8.6 Lot Acceptance Test (LAT)

8.6.1 Conduct

8.6.1.1 The LAT is used to confirm that the manufacturing quality is being maintained during Serial Lot production.

8.6.1.2 For each Serial Lot produced, the Contractor must conduct a LAT IAW the LAT criteria detailed in the approved Technical Specification and IAW with Part 6 of D-09-002-009/SG-000.

8.6.1.3 The Contractor must perform LAT on a sample size determined IAW ISO 2859-1 and Part 4 of D-09-002-009/SG-000.

8.6.1.4 The Contractor must give Canada 10 days advance notice prior to commencing LAT. Canada must be given access to witness all LAT activities.

8.6.2 LAT Report

8.6.2.1 Upon completion of LAT, the Contractor must prepare and deliver the LAT Report IAW CDRL 012 and DID PROD-005.

8.7 System Acceptance Test (SAT)

8.7.1 The purpose of SAT is to verify that the Sniper Cartridge meets specific mandatory requirements prior to being assessed for S3 IAW the ASSB Phase 1 Decision Document. The Sniper Cartridge must successfully pass SAT prior to the conduct of S3 testing (Sequential and Non-Sequential testing).

8.7.2 Canada will plan, coordinate and conduct testing of the Sniper Cartridge using DND ranges and resources to confirm that the cartridge meets the requirements identified in Annex A-2, Appendix 1. Testing will be conducted using CAF in-service Sniper Weapons.

8.7.3 SAT will be conducted by Canada using Production Sniper Cartridges delivered IAW the Contract.

8.8 Safety and Suitability for Service (S3) Testing

8.8.1 Canada will conduct S3 testing IAW Annex A-2, Appendices 2 and 3 where the gap analysis identifies additional or incomplete testing in order to complete the ASSB Phase 2 Decision Document. S3 testing will not be conducted until the Sniper Cartridge passes SAT.

8.8.2 S3 testing will be conducted by Canada using Production Sniper Cartridges delivered IAW the Contract.

8.9 Assessment of S3 Test Results and Data

8.9.1 The Contractor must review all S3 test results and data and deliver recommendations to Canada with respect to applicable mitigation measures for ensuring the S3 throughout the Sniper Cartridge life cycle.

8.9.2 The Contractor must deliver S3 Mitigation Measures IAW CDRL 013 and DID ASSB-003.

8.9.3 The Sniper Project QATA will prepare the final ASSB Phase 2 Decision Document and present it to the ASSB.

8.10 Failure Investigations

8.10.1 The Contractor must investigate all test reports and results that indicate product failure, deficiency, and reliability and safety issues that may arise as a result of SAT and S3 testing.

8.10.2 The Contractor must provide a Failure Investigation Report IAW CDRL 014 and DID PROD-006 to Canada on the findings of the investigation and provide recommendations and solutions.

8.10.3 All recommendations and solutions proposed by the Contractor must be subject to acceptance by Canada prior to implementation.

9 Integrated Logistic Support (ILS) Requirements

9.1 General

9.1.1 This section describes the requirements for ILS work that the Contractor must carry out in support of this requirement.

9.1.2 All ILS related deliverables must be submitted IAW the applicable CDRL and prior to Sniper Cartridges being delivered.

9.2 Material Safety Data Sheet (MSDS)

9.2.1 The Contractor must deliver an MSDS sheet IAW CDRL 015 and DID ILS-001.

9.3 Cataloguing

9.3.1 The Contractor must deliver SPTD for the Sniper Cartridge, sub-assemblies, integral parts and packaging IAW CDRL 016 and DID ILS-002.

9.3.2 The SPTD will be used by Director Supply Chain Operations for verification, identification and cataloguing process.

9.4 Logistic Data Sheet

9.4.1 The Contractor must prepare and deliver a Logistic Data Sheet IAW CDRL 017 and DID ILS-003.

9.5 Ballistic Support

9.5.1 The Contractor must deliver Ballistic Support Documentation IAW CDRL 018 and DID ILS-004.

9.6 Ammunition and Explosives Technical Information Publication (AETIP)

9.6.1 The Contractor must deliver an Ammunition and Explosives Technical Information Publication (AETIP) IAW CDRL 019 and DID ILS-005.

9.6.2 The AETIP must include the required technical data for the Sniper Cartridge and CAF in-service Sniper Weapons. The CAF in-service sniper weapons consist of the current .338 Lapua Magnum C14 and the .338 Lapua Magnum / 7.62mm x 51 multi-calibre C21.

10 Project Management Requirements

10.1 General

10.1.1 The Contractor must utilize project management principles and standardized processes IAW the guidelines of the Project Management Body of Knowledge from the start of the contract until completion of the last deliverable.

10.2 Project Schedule

10.2.1 The Contractor must prepare and deliver a detailed Project Schedule and IAW the CDRL 020 and DID PM-001.

10.2.2 The Contractor must implement and maintain the Project Schedule for the duration of the contract.

10.2.3 The Contractor must maintain and update the Project Schedule on an ongoing basis.

10.2.4 The Contractor must monitor progress and notify the TA of any possible future delay in the schedule. If there are indicators of a future delay, the Contractor must provide a course of action(s) for eliminating or mitigating the delay.

10.3 Kick-Off Meeting

10.3.1 The Contractor must conduct a kick-off meeting no later than ten working days following contract award to review and obtain a common understanding of the work schedule and requirements expressed in the contract.

11 Deliverables

11.1 Data Deliverables

11.1.1 The Contractor must prepare and deliver data required under the contract IAW the CDRLs located in Appendix 1 of this Annex and the corresponding DIDs located in Appendix 2 of this Annex.

11.1.2 Unless otherwise specified in a CDRL or DID the Contractor must deliver all initial, interim and final submissions of data deliverables via electronic mail.

11.1.3 Unless otherwise specified in a CDRL or DID, the Contractor must submit all data deliverables in English.

11.1.4 Submissions that exceed 10MB in size must be sent in multi-part emails. If it is not possible to send a submission in a multi-part email, the submission may be submitted in whole on Compact Disc-Read Only Memory (CD-ROM).

11.1.5 All submissions must be in Microsoft Office 13 compatible format and provide Canada with read and write capability.

11.1.6 All technical drawings must be submitted in Portable Document Format.

11.1.7 The Contractor must deliver all hardcopy data deliverables to the following address:

Project Manager – PMO Sniper Systems
National Defence Headquarters
MGen George R Pearkes Building
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2
Attention: DSSPM 9

11.1.8 The Contractor must maintain and update all data deliverables for the duration of the Contract.

11.2 Ammunition Deliverables

11.2.1 Cartridges

11.2.1.1 Production Sniper Cartridges must be delivered IAW the quantities, locations and timelines described in the contract.

11.2.2 CF1280 Certificate of Release, Inspection and Acceptance – CF1280

11.2.2.1 Each shipment of Sniper Cartridges must be accompanied by a CF1280 Certificate of Release, Inspection and Acceptance prepared by the Contractor and signed by a government quality assurance representative

11.2.2.2 The Certificate of Release, Inspection and Acceptance must constitute confirmation by the Contractor that all items listed therein have been inspected and conform to the specifications and requirements detailed in the contract.

11.2.2.3 Items must not be considered delivered until the CF1280 has been signed by the receiving authority.

11.2.3 Ammunition Manufacturers Data Cards

11.2.3.1 Each shipment of Sniper Cartridges must be accompanied by an Ammunition Manufactures Data Card prepared by the Contractor.

11.2.4 Shipment Notification

11.2.4.1 The TA must be notified five business days prior to shipments leaving the Contractors facility in the form of electronic correspondence. For each lot being delivered, the notification must be accompanied by scanned copies of the CF1280, the Ammunition Manufactures Data Cards and LAT report.

APPENDIX 1 TO ANNEX A-1

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

CONTRACT DELIVERABLE REQUIREMENTS LIST

Reference Number W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
National Defence Headquarters
Major General George R. Pearkes Building
Ottawa, Ontario
K1A 0K2

NOTICE
This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

1. Contract Data Requirements List (CDRL) Item List

1.1 The following table lists the Contract Deliverable Requirements List (CDRL) numbers with title and the corresponding Data Item Description (DID) numbers that apply to this Statement of Work (SOW):

CDRL	Title	Associated Data Item Description (DID)
001	ASSB Technical Letter Data	ASSB-001
002	Phase 2 Supporting Data	ASSB-002
003	Technical Specification	PREP-001
004	Technical Data Package	PREP-002
005	UN Hazard Classification Certificate (NRCAN)	PREP-003
006	UN Hazard Classification Certificate (US DOT)	PREP-004
007	Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR – A&E)	PREP-005
008	Engineering Change Proposals (ECPs)	PROD-001
009	Request for Deviations (RFDs)	PROD-002
010	Request For Waivers (RFWs)	PROD-003
011	First Article Test (FAT) Report	PROD-004
012	Lot Acceptance Test (LAT) Reports	PROD-005
013	S3 Mitigation Measures	ASSB-003
014	Failure Investigation Reports	PROD-006
015	Material Safety Data Sheet (MSDS)	ILS-001
016	Supplementary Provisioning Technical Documentation (SPTD)	ILS-002
017	Logistic Data Sheet	ILS-003
018	Ballistic Support Documentation	ILS-004
019	Ammunition and Explosives Technical Information Publication, .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge and C21 Data	ILS-005
020	Project Schedule	PM-001

2. Applicable Documents

2.1 None.

3 CDRL Definitions

3.1 The following section defines the various blocks of information found on the CDRL forms:

BLOCK A – SYSTEM / ITEM
Provides the name of the System or Item for which the CDRL applies.
BLOCK B – CONTRACT / RFP NUMBER
Identifies the Contract or RFP for which the CDRL applies.
BLOCK C – SOW IDENTIFIER
Identifies the SOW for which the CDRL applies.
BLOCK D – DATA CATEGORY
Identifies the general category of the data for which the CDRL is being prepared.
BLOCK E – CONTRACTOR

This block identifies the Contractor responsible for the delivery of the CDRL.

BLOCK 1 – ITEM NUMBER

The Item Number is a sequential three-digit number to uniquely identify the individual data item (CDRL number).

BLOCK 2 – TITLE OR DESCRIPTION OF DATA

The title of the data item being referred to in this CDRL is described in this block.

BLOCK 3 – SUBTITLE

This block contains the subtitle of the data item for the CDRL if the title requires further identification.

BLOCK 4 – AUTHORITY NUMBER (DID)

This block contains the Data Item Description (DID) number associated with the CDRL item.

BLOCK 5 – CONTRACT REFERENCE

The specific annex and paragraph number of the Statement of Work that identifies the requirement for the Contractor to complete the work associated with the data deliverable is shown here.

BLOCK 6 – REQUIRING OFFICE

This block shows the DND office of primary interest for the review and acceptance of the data item.

BLOCK 7 – INSPECTION

Codes are used to identify the responsible office for inspection and for the acceptance of the data deliverable. If Source is identified as the responsible office, then the activity is to be completed by the local DND Quality Assurance Authority. If Destination is identified, the activity is to be completed by the Requiring Office (Block 6). The following codes are used:

CODE	INSPECTION	ACCEPTANCE
SS	Source	Source
DD	Destination	Destination
SD	Source	Destination
DS	Destination	Source

If no applicable code is available for the data item, this block is marked as N/A.

BLOCK 8 – APPROVAL CODE (APP CODE)

This block identifies which data item requires approval. Items requiring approval will also indicate an initial and final submission (Blocks 12 and 13) and the length of time for DND's review (Block 16). An "A" in Block 8 indicates that approval is required otherwise the block will be blank or "N/A". Notwithstanding the approval code, DND reserves the right to reject a data item as unacceptable if it does not meet the requirements of the DID.

BLOCK 9 – INPUT

If data are the integrated results of specific inputs from associated contractors by an "X" is placed in this block, otherwise the block is left blank.

BLOCK 10 – FREQUENCY

This block indicates the submission frequency of the delivered data. The following frequency codes are used:

ONE/R	One time with revisions
ASREQ	As required
OTIME	One time

BLOCK 11 – AS OF DATE

For data items that are submitted only once, the "as of" date is indicated. The following abbreviations are used for the constraints:

ASGEN	As generated
ASREQ	As required
DACA	Days after contract award
MACA	Months after contract award
EOM	End of month
EOQ	End of quarter

If the as-of date is not applicable, leave this block blank.

BLOCK 12 – DATE OF 1ST SUBMISSION
The initial submission date or associated constraint for the 1st submission of the data item is indicated in this block using typical abbreviations as listed above under Block 11.
BLOCK 13 – DATE OF SUBSEQUENT SUBMISSION / EVENT
The date(s) of subsequent submission(s) or associated constraint(s) of the data item is indicated in this block. The abbreviations used for the constraints are as listed above under Block 11. If subsequent submission or associated are not involved, this block is marked as “N/A”.
BLOCK 14 – DISTRIBUTION AND ADDRESSEES
Indicates the addressees and the respective number of copies (hard copies and soft copies separately), for both the initial or original submissions (Sub-Block “Initial”), and for the final or subsequent submissions (Sub-Block “Final”), for which the data item is required. Initial submission requirements are only identified if Review Cycle is detailed in Block 16.
BLOCK 15 – TOTAL
Indicates the total number of copies (hard copies and soft copies separately) required for both the original submission and for the final submission.
BLOCK 16 – REMARKS
This block allows for additional or clarifying information. Where other blocks refer to Block 16 – Remarks, then the associated block number is indicated with the information, and a “See Block 16” note would be entered in the referring block.
BLOCKS 17 – 19
These blocks are for Contractor input as required as part of the RFP or Contract. These blocks are not used on this contract.
BLOCK – PREPARED BY
This block identifies the CDRL originator’s name and designation.
BLOCK – DATE
This block indicates the date of the CDRL approval in DND.
BLOCK – APPROVED BY
This block contains the identification information, such as name and designation, of the person approving the CDRL.

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 7.1.2		D. DATA CATEGORY Ammunition Safety and Suitability for Service		E. CONTRACTOR TBD				
1. ITEM NUMBER **001**		2. TITLE OR DESCRIPTION OF DATA **ASSB Technical Letter Data**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) ASSB-001		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY OTIME	12. DATE OF 1st SUBMISSION See block 16	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: ASSB Technical Letter Data must be submitted no later than 20 working days following Contract award. Comments on the submission must be provided by Canada within 20 working days of receipt. Block 13: Revised ASSB Technical Letter Data addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments.				PCO		1		1
				DLP		1		1
				SEM		1		1
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 7.2.2		D. DATA CATEGORY Ammunition Safety and Suitability for Service		E. CONTRACTOR TBD					
1. ITEM NUMBER **002**		2. TITLE OR DESCRIPTION OF DATA **Phase 2 Supporting Data**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) ASSB-002		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The Phase 2 Supporting Data must be submitted no later than 30 working days following Contract award. Comments on the Phase 2 Supporting Data will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the Phase 2 Supporting Data must be submitted for approval no later than 10 working days following the receipt of Canada's comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE/DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 7.3.1		D. DATA CATEGORY Pre-Production		E. CONTRACTOR TBD				
1. ITEM NUMBER **003**		2. TITLE OR DESCRIPTION OF DATA **Technical Specification**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) PREP-001		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The Technical Specification must be submitted within 20 working days following Contract award. Comments on the Technical Specification will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the Technical Specification, addressing Canada's comments, must be submitted for approval within 10 working days following receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 7.4.1		D. DATA CATEGORY Pre-Production		E. CONTRACTOR TBD					
1. ITEM NUMBER **004**		2. TITLE OR DESCRIPTION OF DATA **Technical Data Package (TDP)**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) PREP-002		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16	a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The TDP must be submitted no later than 20 working days following Contract award. Comments on the TDP will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the TDP must be submitted no later than 10 working days following the receipt of Canada's comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9		DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER		18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $	15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 7.5.1.1		D. DATA CATEGORY Pre-Production		E. CONTRACTOR TBD				
1. ITEM NUMBER **005**		2. TITLE OR DESCRIPTION OF DATA **UN Hazard Classification Certificate (NRCAN)**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) PREP-003		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY OTIME	12. DATE OF 1st SUBMISSION	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
8. APP CODE A		11. AS OF DATE See Block 16	13. DATE OF SUBSEQUENT SUBMISSION / EVENT		INITIAL		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 11: The UN Hazard Classification Certificate (NRCAN) must be submitted no later than 40 working days following Contract award. Comments on the UN Hazard Classification Certificate (NRCAN) will be provided by Canada within 5 working days of receipt. The revised UN Hazard Classification Certificate (NRCAN) must be submitted no later than 5 working days following the receipt of Canada's comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY DSSPM 9		DATE Jun 2019	APPROVED BY					
17. CONTRACT FILE / DOCUMENT NUMBER		18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $	15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM				B. CONTRACT / RFP NUMBER				
.338 lapua Magnum API Sniper Cartridge				TBD				
C. SOW IDENTIFIER		D. DATA CATEGORY		E. CONTRACTOR				
7.5.2.1		Pre-Production		TBD				
1. ITEM NUMBER		2. TITLE OR DESCRIPTION OF DATA		3. SUBTITLE				
006		**UN Hazard Classification Certificate (US DOT)**		n/a				
4. AUTHORITY (Data Item Number)		5. CONTRACT REFERENCE		6. REQUIRING OFFICE				
PREP-004		TBD		DSSPM 9				
7. INSPECTION	9. INPUT	10. FREQUENCY	12. DATE OF 1st SUBMISSION	14. DISTRIBUTION and ADDRESSEES				
DD		OTIME		a. ADDRESS	b. COPIES			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT		INITIAL		FINAL	
A		See Block 16			Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 11: The UN Hazard Classification Certificate (US DOT) must be submitted no later than 40 working days following Contract award. Comments on the UN Hazard Classification Certificate (US DOT) will be provided by Canada within 5 working days of receipt. The revised UN Hazard Classification Certificate (US DOT) must be submitted no later than 5 working days following the receipt of Canada's comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY	DATE	APPROVED BY						
DSSPM 9	Jun 2019							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE		15. TOTAL	0	3	0	3
		$						

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM				B. CONTRACT / RFP NUMBER				
.338 lapua Magnum API Sniper Cartridge				TBD				
C. SOW IDENTIFIER		D. DATA CATEGORY		E. CONTRACTOR				
7.6.1		Pre-Production		TBD				
1. ITEM NUMBER		2. TITLE OR DESCRIPTION OF DATA		3. SUBTITLE				
007		**Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR – A&E)**		n/a				
4. AUTHORITY (Data Item Number)		5. CONTRACT REFERENCE		6. REQUIRING OFFICE				
PREP-005		TBD		DSSPM 9				
7. INSPECTION	9. INPUT	10. FREQUENCY	12. DATE OF 1st SUBMISSION	14. DISTRIBUTION and ADDRESSEES				
DD		ONE/R	See Block 16	a. ADDRESS	b. COPIES			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT		INITIAL		FINAL	
A			See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The EOHSIR – A&E must be submitted no later than 40 working days following Contract award. Comments on the EOHSIR – A&E will be provided by Canada within 40 working days of receipt Block 13: Revised versions of the EOHSIR – A&E addressing Canada's comments must be submitted for approval no later than 10 working days following the receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY	DATE	APPROVED BY						
DSSPM 9	Jun 2019							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE		15. TOTAL	0	3	0	3
		$						

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 8.2.2.1		D. DATA CATEGORY Production		E. CONTRACTOR TBD					
1. ITEM NUMBER **008**		2. TITLE OR DESCRIPTION OF DATA **Engineering Change Proposals (ECPs)**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) PROD-001		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ASREQ	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The Contractor must submit an ECP for review prior to changes being made to the affected item(s) in question and configuration status of the part in accordance with the SOW. Comments on the ECP will be provded by Canada within 10 working days of receipt. Block 13: A revised ECP addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9		DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER		18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $	15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM				B. CONTRACT / RFP NUMBER				
.338 lapua Magnum API Sniper Cartridge				TBD				
C. SOW IDENTIFIER		D. DATA CATEGORY		E. CONTRACTOR				
8.2.3.1		Production		TBD				
1. ITEM NUMBER		2. TITLE OR DESCRIPTION OF DATA		3. SUBTITLE				
009		**Request for Deviations (RFDs)**		n/a				
4. AUTHORITY (Data Item Number)		5. CONTRACT REFERENCE		6. REQUIRING OFFICE				
PROD-002		TBD		DSSPM 9				
7. INSPECTION	9. INPUT	10. FREQUENCY	12. DATE OF 1st SUBMISSION	14. DISTRIBUTION and ADDRESSEES				
DD		ASREQ	See Block 16	a. ADDRESS	b. COPIES			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT		INITIAL		FINAL	
A			See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The Contractor must submit an RFD as soon as the Contractor determines, prior to manufacture of items, that it is not possible to satisfy the requirements of the specifications or drawings. Comments on the RFD will be provded by Canada within 10 working days of receipt. Block 13: A revised RFD addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY	DATE	APPROVED BY						
DSSPM 9	Jun 2019							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE		15. TOTAL	0	3	0	3
		$						

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 8.2.4.1		D. DATA CATEGORY Production		E. CONTRACTOR TBD				
1. ITEM NUMBER **010**		2. TITLE OR DESCRIPTION OF DATA **Request For Waivers (RFWs)**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) PROD-003		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ASREQ	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The Contractor must submit an RFW as soon as the Contractor determines, either during or after manufacture of items, that the items do not meet specified requirements. Comments on the RFW will be provded by the DND TA within 10 working days of receipt. Block 13: A revised RFW addressing Canada's comments shall be submitted for approval within 5 working days of receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 8.5.2.1		D. DATA CATEGORY Production		E. CONTRACTOR TBD					
1. ITEM NUMBER **011**		2. TITLE OR DESCRIPTION OF DATA **First Article Test (FAT) Report**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) PROD-004		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: If a FAT is required, a FAT Report must be submitted no later than 10 working days following completion of FAT. Comments on the FAT Report will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the FAT Report addressing Canada's comments must be submitted no later than 5 working days following the receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 8.6.2.1		D. DATA CATEGORY Production		E. CONTRACTOR TBD					
1. ITEM NUMBER **012**		2. TITLE OR DESCRIPTION OF DATA **Lot Acceptance Test (LAT) Reports**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) PROD-005		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16	a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: LAT Reports must be submitted prior to shipping and no later than 10 working days following completion of each LAT for each Serial Lot of cartridges. Comments on the LAT Report will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the LAT Report addressing Canada's comments must be submitted no later than 5 working days following the receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 8.9.2		D. DATA CATEGORY Ammunition Safety and Suitability for Service		E. CONTRACTOR TBD				
1. ITEM NUMBER **013**		2. TITLE OR DESCRIPTION OF DATA **S3 Mitigation Measures**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) ASSB-003		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The S3 Mitigation Measures must be submitted no later than 15 working days following receipt of the S3 test data. Comments on the S3 Mitigation Measures will be provided by Canada within 10 working days of receipt. Block 13: Revised versions of the S3 Mitigation Measures addressing Canada's comments must be submitted for approval no later than 5 working days following receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE/DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD				
C. SOW IDENTIFIER 8.10.2		D. DATA CATEGORY Production		E. CONTRACTOR TBD				
1. ITEM NUMBER **014**		2. TITLE OR DESCRIPTION OF DATA **Failure Investigation Reports**		3. SUBTITLE n/a				
4. AUTHORITY (Data Item Number) PROD-006		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ASREQ	12. DATE OF 1st SUBMISSION See block 16	14. DISTRIBUTION and ADDRESSEES				
				a. ADDRESS	b. COPIES			
					INITIAL		FINAL	
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: A Failure Investigation Report must be delivered by the Contractor no later than 5 working days following the failure incident. Canada will have 10 working days to review the initial submission of the Failure Investigation Report and provide comments. Block 13: A revised Failure Investigation Report addressing Canada's comments must be submitted by the Contractor for approval within 5 working days of receipt of comments..				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 9.2.1		D. DATA C182 Sniper Cartridge CATEGORY Integrated Logistic Support		E. CONTRACTOR TBD					
1. ITEM NUMBER **015**		2. TITLE OR DESCRIPTION OF DATA **Material Safety Data Sheet (MSDS)**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) ILS-001		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY See Block 16	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16	a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The MSDS must be submitted no later than 20 working days following Contract award. Comments on the MSDS will be provided by Canada within 10 working days of receipt. The revised MSDS must be submitted no later than 5 days following receipt of comments. Block 13: A hard copy of the approved MSDS must be delivered with the first shippment of cartridges to each different location as identified in the contract.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
				CFAD Dundurn			1		
				CFAD Angus			1		
				CFAD Valcartier			1		
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	3	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 9.3.1		D. DATA CATEGORY Integrated Logistic Support		E. CONTRACTOR TBD					
1. ITEM NUMBER **016**		2. TITLE OR DESCRIPTION OF DATA **Supplementary Provisioning Technical Documentation (SPTD)**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) ILS-002		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY OTIME	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The Contractor shall submit SPTD to support DND catologuing and ILS activities throughout the course of the contract. All SPTD must be submitted, approved and finalized no later than 40 working days prior to production. Comments on the SPTD will be provided by DND within 10 working days of receipt. Block 13: Revised SPTD addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM				B. CONTRACT / RFP NUMBER				
.338 lapua Magnum API Sniper Cartridge				TBD				
C. SOW IDENTIFIER		D. DATA CATEGORY		E. CONTRACTOR				
9.4.1		Integrated Logistic Support		TBD				
1. ITEM NUMBER		2. TITLE OR DESCRIPTION OF DATA		3. SUBTITLE				
017		**Logistic Data Sheet**		n/a				
4. AUTHORITY (Data Item Number)		5. CONTRACT REFERENCE		6. REQUIRING OFFICE				
ILS-003		TBD		DSSPM 9				
7. INSPECTION	9. INPUT	10. FREQUENCY	12. DATE OF 1st SUBMISSION	14. DISTRIBUTION and ADDRESSEES				
DD		ONE/R	See Block 16	a. ADDRESS	b. COPIES			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT		INITIAL		FINAL	
A			See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS Block 12: The Logistic Data Sheet must be submitted no later than 20 days following Contract award. Comments on the Logistic Data Sheet will be provded by Canada within 10 working days of receipt. Block 13: Revisions of the Logistic Data Sheet addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments.				PCO		1		1
				DLP		1		1
				PSPC				
				SEM		1		1
PREPARED BY	DATE	APPROVED BY						
DSSPM 9	Jun 2019							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE		15. TOTAL	0	3	0	3
		$						

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 9.5.1		D. DATA CATEGORY Integrated Logistic Support		E. CONTRACTOR TBD					
1. ITEM NUMBER **018**		2. TITLE OR DESCRIPTION OF DATA **Ballistic Support Documentation**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) ILS-004		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
					INITIAL		FINAL		
8. APP CODE A		11. AS OF DATE See Block 16	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The Ballistic Support Documentation must be submitted no later than 20 working days following the receipt of weapon system technical data from Canada. Comments on the Ballistic Support Documentation will be provided by Canada within 10 working days of receipt. Block 13: Revisions of the Ballistic Support Documentation addressing Canada's comments must be submitted for approval within 10 working days of receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9	DATE Jun 2019	APPROVED BY							
17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $		15. TOTAL	0	3	0	3	

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM			B. CONTRACT / RFP NUMBER
.338 lapua Magnum API Sniper Cartridge			TBD
C. SOW IDENTIFIER	D. DATA CATEGORY		E. CONTRACTOR
9.6.1	Integrated Logistic Support		TBD
1. ITEM NUMBER	2. TITLE OR DESCRIPTION OF DATA		3. SUBTITLE
019	**Ammunition and Explosives Technical Information Publication, .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge and C21 Data**		n/a
4. AUTHORITY (Data Item Number)	5. CONTRACT REFERENCE		6. REQUIRING OFFICE
ILS-005	TBD		DSSPM 9

7. INSPECTION	9. INPUT	10. FREQUENCY	12. DATE OF 1st SUBMISSION
DD		ONE/R	See Block 16
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT
A			See Block 16

16. REMARKS

This CDRL covers the phased development of the AETIP Update. The unilingual versions are delivered first and when they have been approved the Contractor is authorized to proceed with translation and resubmit for a final review and approval cycle.

Block 12 and 13:

Unilingual English Publication - Unvalidated

A draft of the unilingual publication (unvalidated) must be delivered no later than 60 working days following Contract award.

Comments on the Unilingual English Publication - Unvalidated will be provided by Canada within 20 working days of receipt.

Unilingual English Publication - Validated

A revision to the Unilingual Publication addressing Canada's comments must be submitted for approval within 10 working days of receipt of comments. The Canada approved version will form the "Unilingual English Publication - Validated."

Bilingual French/English Publication - Unvalidated

A draft of the bilingual publication (unvalidated) must be delivered no later than 20 working days following the validation of the English only version.

Comments on the Bilingual Publication - Unvalidated will be provided by Canada within 10 working days of receipt.

Bilingual French/English Publication - Validated

A revision to the Bilingual Publication addressing Canada's comments must be submitted for approval within 20 working days of receipt of comments. The Canada approved version will form the "Bilingual French/English Publication - Validated."

14. DISTRIBUTION and ADDRESSEES				
a. ADDRESS	b. COPIES			
	INITIAL		FINAL	
	Hard Copy	Soft Copy	Hard Copy	Soft Copy
PCO		1		1
DLP		1		1
PSPC				
SEM		1		1
15. TOTAL	0	3	0	3

PREPARED BY	DATE	APPROVED BY
DSSPM 9	Jun 2019	

17. CONTRACT FILE / DOCUMENT NUMBER	18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE
		$

CONTRACT DATA REQUIREMENTS LIST (1 DATA ITEM)

A. SYSTEM / ITEM .338 lapua Magnum API Sniper Cartridge				B. CONTRACT / RFP NUMBER TBD					
C. SOW IDENTIFIER 10.2.1		D. DATA CATEGORY Project Management		E. CONTRACTOR TBD					
1. ITEM NUMBER **020**		2. TITLE OR DESCRIPTION OF DATA **Project Schedule**		3. SUBTITLE n/a					
4. AUTHORITY (Data Item Number) PM-001		5. CONTRACT REFERENCE TBD		6. REQUIRING OFFICE DSSPM 9					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
				a. ADDRESS	b. COPIES				
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION / EVENT See Block 16		INITIAL		FINAL		
					Hard Copy	Soft Copy	Hard Copy	Soft Copy	
16. REMARKS Block 12: The Contractor shall submit the Project Schedule no later than 10 working days following Contract award. Comments on the initial Project Schedule will be provided by Canada within 10 working days of receipt. Block 13: The revised Project Schedule addressing Canada's comments must be submitted for approval within 5 working days of receipt of comments. Any changes to the schedule following approval must be reviewed and approved by both the Contractor and Canada. Subsequent changes to the schedule must be submitted by the Contractor. Canada will have 5 working days to review the changes and provide feedback. Revisions addressing Canada's comments must be submitted 2 working days following receipt of comments.				PCO		1		1	
				DLP		1		1	
				PSPC					
				SEM		1		1	
PREPARED BY DSSPM 9		DATE Jun 2019	APPROVED BY						
17. CONTRACT FILE / DOCUMENT NUMBER		18. ESTIMATED NO OF PAGES	19. ESTIMATED PRICE $	15. TOTAL	0	3	0	3	

APPENDIX 2 to ANNEX A-1

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

DATA ITEM DESCRIPTION

Reference Number W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
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Ottawa, Ontario
K1A 0K2

NOTICE
This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

1 List of DIDs

1.1 The following table lists the Data Item Description (DID) numbers with DID title and the corresponding Contract Deliverable Requirements List (CDRL) numbers that apply to this Statement of Work (SOW):

DID	Title	Associated (CDRL)
ASSB-001	ASSB Technical Letter Data	001
ASSB-002	Phase 2 Supporting Data	002
ASSB-003	S3 Mitigation Measures	013
PREP-001	Technical Specification	003
PREP-002	Technical Data Package (TDP)	004
PREP-003	UN Hazard Classification Certificate (NRCAN)	005
PREP-004	UN Hazard Classification Certificate (US DOT)	006
PREP-005	Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR – A&E)	007
PROD-001	Engineering Change Proposals (ECPs)	008
PROD-002	Request for Deviations (RFDs)	009
PROD-003	Request For Waivers (RFWs)	010
PROD-004	First Article Test (FAT) Report	011
PROD-005	Lot Acceptance Test (LAT) Reports	012
PROD-006	Failure Investigation Reports	014
ILS-001	Material Safety Data Sheet (MSDS)	015
ILS-002	Supplementary Provisioning Technical Documentation (SPTD)	016
ILS-003	Logistic Data Sheet	017
ILS-004	Ballistic Support Documentation	018
ILS-005	Ammunition and Explosives Technical Information Publication, .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge and C21 Data	019
PM-001	Project Schedule	020

2 Acronyms

AOP	Allied Ordnance Publication
ARSP	Allied Range Safety Publication
ASSB	Ammunition Safety and Suitability for Service
CAF	Canadian Armed Forces
CAS	Chemical Abstract Service
CDRL	Contract Data Requirements List
CI	Configuration Item
CEPA	Canadian Environmental Protection Act

CPR	Controlled Products regulations
DID	Data Item Description
DGLEPM	Director General Land Equipment Program Management
DLEPS	Director Land Equipment Program Staff
DND	Department of Defence
DSSPM	Director Soldier Systems Program Management
ECP	Engineering Change Proposal
EOHSIR-A&E	Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives
FAT	First Article Test
GIDEP	Government/Industry Data Exchange Program
HCC	Hazard Classification Code
IAW	In Accordance With
ILS	Integrated Logistic Support
LAT	Lot Acceptance Test
MOA	Minute of Angle
MSDS	Material Safety Data Sheets
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Governmental Entity
NEQ	Net Explosive Quantity
NRCAN	Natural Resources Canada
NPRI	National Pollutant Release Inventory
OPI	Office of Primary Interest
PDF	Portable Document Format
PM	Project Management
PREP	Pre-Production
PROD	Production
PRODAS	Projectile Rocket Ordnance Design & Analysis System
RFD	Request for Deviation
RFW	Request for Waiver
S3	Safety and Suitability for Service
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Data
TAC	Translation Accuracy Check
TDP	Technical Data Package
UN	United Nations
US DOT	United States Department of Transportation
VEC	Valued Ecosystem Components

3 **Applicable Documents**

3.1 **Commercially Available Documents**

a. Allied Ordnance Publication (AOP)-15, Guidance on the Assessment of the Safety and Suitability for Service of Non-Nuclear Munitions for NATO Armed Forces; and

b. Allied Range Safety Publication (ARSP)-01, Volume II, Weapon Danger Area Areas / Zones for Unguided Weapons for Use by NATO Forces in a Ground Role.

3.2 Government Supplied Documents

a. A-LM-505-010/JS-001 Official Languages Requirements for Technical Documentation

b. C-01-100-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications;

c. C-01-100-100/AG-006 Specification Writing, Format and Production of Technical Publications;

d. D-01-100-200-SF-000 Specification Preparation of Equipment Data Summaries;

e. D-01-100-207-SF-002 Specification Preparation of Interim Illustrated Parts Manuals for Land Equipment;

f. D-01-002-000/SG-000 Standard for Ammunition and Explosives Technical Information Documents;

g. D-01-400-002/SF-000 Specification for Levels of Engineering Drawings and Associated Lists;

h. D-01-400-001/SG-000 Engineering Drawing Practices;

i. D-02-006-008/SG-001 National Defence Standard – The Design Change, Deviation and Waiver Procedure; and

j. D-09-002-010/SG-00 Standard Assessment of the Safety and Suitability for Service of Ammunition and Explosives;

4 Data Item Description (DID) Definition

4.1 A description of each block of information used in DID follows:

BLOCK 1 – TITLE: This is the title of the DID and usually corresponds to the associated CDRL item title, except where a DID is referenced by more than one CDRL item.

BLOCK 2 – DATA ITEM DESCRIPTION NUMBER: This is the number assigned by the Office of Primary Interest (OPI) to the DID and identifies the area of activity to which the DID is applied. These areas include Pre-Production (PREP), Production (PROD), Integrated Logistic Support (ILS) and Project Management (PM).

BLOCK 3 – DESCRIPTION: This provides a general information on how the data detailed in the DID is to be used.

BLOCK 4 – APPROVAL DATE: This is the date that the OPI has approved the contents of the DID.

BLOCK 5 – OFFICE OF PRIMARY INTEREST: This identifies the DND responsibility centre for review, acceptance and approval of the DID.

BLOCK 6 – GIDEP APPLICABLE: An “X” indicates that the data is to be submitted by a Government organization or the Contractor to the Government/Industry Data Exchange Program. Otherwise the block is left blank.

BLOCK 7 – APPLICATION / INTERRELATIONSHIP: This block identifies the scope of the DID and where the DID requirement is defined; i.e. the applicable portion of the contract.

BLOCK 8 – ORIGINATOR: This identifies the originator of the DID on behalf of the OPI in Block 5.

BLOCK 9 – APPLICABLE FORMS: This identifies a published form or template to be used in the completion of the DID if applicable.

BLOCK 10 – PREPARATION INSTRUCTIONS: This provides the preparation details for the format and the content in the completion of the DID. This item forms the requirement for the Contract.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
ASSB Technical Letter Data	**ASSB-001** (CDRL 001)

3. DESCRIPTION

The Ammunition Safety and Suitability for Service (ASSB) Technical Letter Data is used to support the development of a technical letter. A technical letter is used to assess safety and suitability with respect to the use of non-Department of National (DND)/Canadian Armed Forces (CAF) ammunition in tests, trials and demonstrations conducted on DND property or by DND/CAF personnel. It analyzes the interaction of the ammunition with its associated weapon systems. See part 5 and Annex E of D-09-002-010/SG-00, Standard for the Assessment of the Safety and Suitability for Service of Ammunition and Explosives for further details.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the ASSB Technical Letter Data as required by the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS
DSSPM 9	

10. PREPARATION INSTRUCTIONS

10.1 The contractor must provide the following technical data for the .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge (Sniper Cartridge) in support of an ASSB technical letter:

a. Cartridge Description:

i. Cartridge Photograph (side and head stamp view);

ii. Part or Model Number;

iii. NATO Stock Number (if available);

iv. Manufacturer including NATO Commercial and Government Entity (NCAGE) (If available);

v. Cartridge Functioning: Technical description from initiation to terminal effects

vi. Physical description of all up cartridge and each sub-component (Projectile, Casing, Propellant, Primer and waterproofing);

vii. Cartridge overall length and mass;

viii. Projectile Length, diameter and mass;

ix. Casing dimensions and mass;

x. Propellant type, part number and charge weight;

xi. Indicate the standards that the cartridge operation, dimensions and pressures are based on;

xii. Design history of the cartridge including qualifications for combat service;

xiii. Known weapons that the cartridge has been tested with and weapons that the cartridge has been qualified with;

xiv. G7 ballistic coefficient;

xv. Energetic materials qualification testing or certification, confirming that all energetic materials in the cartridge have undergone appropriate testing and assessment IAW STANAG 4170 and AOP-07 or equivalent demonstrating that it possesses properties which make it safe for consideration for use in the environments described in the Performance Specification.

xvi. Indicate if the cartridge has been approved for use by Natural Resources of Canada and the United States Department of Transportation including certificates if they exist;

DID ASSB-001 Continued…

xvii. United Nations (UN) Number;

xviii. UN Hazard Classification;

xix. Type of Explosive;

xx. Photographs of existing inner and outer packaging

xxi. Inner packaging description;

xxii. Outer packaging (ammunition canister) description, part number and other data including: total quantity of cartridges, weight (kg), NEQ/pack, dimensions (cm/m);

xxiii. Pallet data including: Quantity (pack/pallet), physical arrangement, weight (kg), NEQ/pallet, dimensions (m);

xxiv. Shelf Life with note as to how it was determined and the required conditions;

xxv. Storage Temperature Limitations;

b. Electronic Pressure, Velocity and Action Time measurement values with standard deviations for ambient, +52 Degrees Celsius and -54 Degrees Celsius;

c. Projectile pressure limits;

d. Provide Potential hazards for personnel, the test weapon and the cartridge itself.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
Phase 2 Supporting Data	**ASSB-002** (CDRL 002)

3. DESCRIPTION

Provided data will be used to develop the ASSB Phase 2 Decision Document and to perform a gap analysis to identify Safety and Suitability for Service (S3) requirements that require testing.

This data consists of existing technical documentation, certifications, test reports and data that can be used to determine which requirements from the ASSB Phase 1 Decision document still need to be satisfied with additional testing and/or certifications.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the Phase 2 Supporting Data required by the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 Contractors own format is acceptable.

10.1.2 The data must be accompanied by a Matrix consisting of the S3 test requirements from Annex A-2, Appendices 2 and 3, cross referenced to the provided technical data.

10.2 Content

10.2.1 The Phase 2 Supporting Data must consist of the following:

a. Description. A technical description of the Sniper Cartridge in its delivered configuration; its sub-components, firing sequence and packaging along with diagrams;

b. Design History. A full design history, including strength of design and major design changes through the design process;

c. Hazard Assessment. Identification of all potential hazards associated with the Sniper Cartridge and its probability of occurrence;

d. Ammunition Qualification Data. Certified S3 test data that supports the qualification of the Sniper Cartridge with respect to the requirements detailed in Annex A-2, Appendices 2 and 3 including: Previous S3 data, First Article Test (FAT) Reports, 3 x recent Lot Acceptance Test (LAT) reports, qualification of energetic materials and packaging along with all specifications/standards used and pass/fail criteria. The provided technical data must consist of test reports, certifications, qualifications, summaries and other existing technical data that support the S3 sequential and non-sequential test requirements (Annex A-2, Appendices 2 and 3);

e. Ballistic Support. Requirements for Danger Area Template with diagram and firing tables;

f. Insensitive Munitions Assessment. Analysis, test results and statement of ammunition’s level of insensitivity;

g. Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR-A&E) if one already exists that has been approved by Canada;

h. Design Safety Hazard Assessment: Details of safety requirements for critical components and test results.

i. In-Service Considerations:

i. Shelf Life. Details including method (test and/or analysis) of determination;

ii. Maintenance. Details of any requirements throughout service life;

DID ASSB-002 Continued…

iii. Personnel Safety. Details of any safety measures to be followed for handling/transport, use and storage;

iv. UN Number and Hazard Classification Code (HCC); Natural Resources Canada and US Department of Transportation Certifications;

v. Disposal and Demilitarization. Details of procedures for malfunctioned, surplus and deteriorated cartridges.

j. Risk Assessment. Determination of risk level and mitigating measures against identified hazards IAW AOP-15.

DATA ITEM DESCRIPTION		
1. TITLE **S3 Mitigation Measures**		2. IDENTIFICATION NUMBER **ASSB-003** (CDRL 013)
3. DESCRIPTION This includes hazard mitigation measures that are to be incorporated into the final ASSB Phase 2 Decision document as a result of S3 testing results and in addressing any residual risk items from the preliminary hazard assessment.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the S3 Risk Mitigation Measures as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Contractors own format is acceptable.

10.2 Content

10.2.1 The document must contain recommended mitigation measures in consideration of the ASSB Phase 1 Decision Document hazard analysis, existing S3 test data and S3 data generated by Canada.

10.2.2 The S3 Risk Mitigation measures must ensure the items safety and suitability for service throughout its entire life cycle.

DATA ITEM DESCRIPTION		
1. TITLE **Technical Specification**		2. IDENTIFICATION NUMBER **PREP-001** (CDRL 003)
3. DESCRIPTION The Technical Specification contains all of the technical and performance requirements for the Sniper Cartridge and forms the basis for First Article Test (FAT) and Lot Acceptance Test (LAT) during production. As such it contains the test plans, procedures, sampling sizes and sentencing for FAT and LAT.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the Technical Specification as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Contractor's own format is acceptable.

10.2 Content

10.2.1 The Technical Specification must contain all of the technical and performance related requirements for the Sniper Cartridge. It must also contain all of the information and test plans required to verify and confirm that the Sniper Cartridge has been successfully produced on an industrial scale and that the quality for the pilot and serial lots will be maintained.

10.3 Amplifying Detail

10.3.1 The Technical Specification must include the following parts and annexes:

10.3.1.1 Part 1: General

a. Introduction;

b. Cartridge Description, Details of Use, Theory of Operation and manufacture information for the ammunition and explosive;

c. Applicable Military, Commercial and Original Equipment Manufacturer Internal Documentation and Standards; and

d. Definitions;

10.3.1.2 Part 2: Production and Lotting Procedures;

10.3.1.3 Part 3: Requirements:

a. Component Level Requirements. This includes the composition, charge weight, manufacturing standard and conformity requirements for all energetic materials.

b. Cartridge Level Requirements. This includes precision, bullet extraction, residual stress, water tightness, Electronic Pressure, Velocity and Action Time at +21, +52 and -54 Degrees Celsius.

c. Performance Requirements. The specification must address the requirements from the DND Performance Specification (Annex A-2).

10.3.1.4 Part 4: First Article Test: The Contractor must propose applicable test plans, procedures and criteria for FAT. It must be designed to confirm that the Sniper Cartridge design can be manufactured to the standard required for serial production.

DID PREP-001 Continued…

10.3.1.5 Part 5: Lot Acceptance Test: The Contractor must propose applicable test plans, procedures and criteria for LAT. It must be designed to confirm that the manufacturing quality is being maintained during Serial Lot production.

10.3.2 FAT and LAT Test Plans and Procedures

10.3.2.1 The Contractor must propose an appropriate test program consisting of test plans, procedures, sampling criteria and sentencing criteria for FAT and LAT that is based on NATO standards where applicable. All other procedures that cannot be based on NATO standards must be commensurate with existing industry best practices for comparable natures of ammunition. The proposed test plans and procedures must include inspections, demonstrations and functional tests designed to confirm that the produced cartridges are meeting the Technical Specification and that the quality of manufacturing is being maintained.

DATA ITEM DESCRIPTION		
1. TITLE **Technical Data Package (TDP)**		2. IDENTIFICATION NUMBER **PREP-002** (CDRL 004)
3. DESCRIPTION The TDP consists of engineering drawings and Data Lists that define the baseline configuration for the cartridge (down to the component level), packaging, palletization, colours and markings.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the TDP as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Engineering Drawings and Data lists may be in the Contractors own format.

10.2 Content

10.2.1 The drawings must detail all dimensions, weights, markings/identification, source of supply and information for:

a. The full-up cartridge;

b. All sub-components, including projectile, casing, primer, propellant and waterproofing compounds;

c. Bullet extraction force and tolerance;

d. Inner packaging;

e. Outer Packaging;

f. All markings and identifications;

g. Aids to production; and

h. Palletized Unit Load configuration and sub-components, including the pallet, spacers, edging, strapping, etc.

10.2.2 The markings/identification drawings must include locations, method and format (Font, size, shape, colours, orientation, etc.) for marking the:

a. Cartridge and its sub-components;

b. Inner and outer packaging; and

c. Palletized Unit Load.

10.2.3 All drawings must include the following information for every item identified in the integral parts list:

a. Identification or Part Number;

b. Nomenclature;

c. Specification, if applicable; and

d. Code Ident or NATO Commercial and Governmental Entity (NCAGE). If an NCAGE does not exist for a specific supplier, the Contractor must provide the full business name, address, web site address and supplier contact information.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
UN Hazard Classification Certificate (NRCAN)	**PREP-003** (CDRL 005)

3. DESCRIPTION

The UN Hazard Classification Certificate Natural Resources Canada (NRCAN) is issued by Natural Resources Canada indicating the authorization and classification of explosives.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the UN Hazard Classification Certificate as required in the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The UN Hazard Classification Certificate (NRCAN) must be in the certificate format as received from the Natural Resources Canada.

10.2 Content

10.2.1 The UN Hazard Classification Certificate (NRCAN) must be dated and signed by the Chief Inspector of Explosives from the Explosives Security and Safety Branch of NRCAN.

10.2.2 The UN Hazard Classification Certificate (NRCAN) must identify the Sniper Cartridge as being authorized explosives under the Canadian Explosives Act and list all of the required information including UN Number, UN Classification Code, Packaging Instructions, Canadian Class, Type of Explosive and Hazard Category.

10.2.3 The UN Hazard Classification Certificate (NRCAN) must positively identify the Sniper Cartridge by its nomenclature and NSN.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
UN Hazard Classification Certificate (US DOT)	**PREP-004** (CDRL 006)

3. DESCRIPTION

The UN Hazard Classification Certificate United States Department of Transportation (US DOT) is issued by the US DOT indicating the authorization and classification of explosives.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the UN Hazard Classification Certificate (US DOT) as required in the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The UN Hazard Classification Certificate (US DOT) must be in the certificate format as received from the US DOT.

10.2 Content

10.2.1 The UN Hazard Classification Certificate (US DOT) must be signed and dated by an authority within the US DOT administration.

10.2.2 The UN Hazard Classification Certificate (US DOT) must identify the Sniper Cartridge as being classed in accordance with the US Code of Federal Regulations 49 and lists all of the required information including: UN Proper Shipping Name, UN number, UN Classification Code, Certificate Reference Number.

10.2.3 The UN Hazard Classification Certificate (US DOT) must positively identify the Sniper Cartridge by its nomenclature and NSN.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
Environmental and Occupational Health and Safety Impact Report – Ammunition and Explosives (EOHSIR – A&E)	**PREP-005** (CDRL 007)

3. DESCRIPTION

This assessment is conducted in support of the ASSB Phase 2 Decision Document S3 assessment for the Sniper Cartridge. The report identifies and documents the Environmental and Occupational Health and Safety impacts of the Sniper Cartridge throughout the various life cycle phases (storage, transportation, testing, use, demilitarization and disposal) from contractual ownership by the DND/CAF to demilitarization and disposal. Mitigation measures are recommended in order to eliminate or reduce significant Environmental and Occupational Health and Safety risks.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9-2	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the EOHSIR – A&E as required by the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The EOHSIR – A&E must have the same arrangement and tables as detailed in the content section.

10.2 Content

10.2.1 Title Page

a. Ammunition and Explosive Name;

b. DGLEPM Registration Number (to be provided by DLEPS 6); and

c. Date: [Date last modified].

10.2.2 Synopsis: This section must provide a brief summary of main conclusions, major concerns with mitigation measures, residual risks, if any, and main recommendations.

10.2.3 References

a. Regulations and Policies - This section must list all applicable Canadian regulations and policies;

b. Other references - This section must list the references and material used to produce the EOHSIR – A&E.

10.2.4 Ammunition and Explosive Description: This section must contain a brief description of the ammunition item under the following sub-paragraphs:

10.2.4.1 General Description: Provide a description of the role, purpose and concept of operation of the cartridge.

10.2.4.2 Major Sub-System: Identify the major sub-components of the cartridge and provide a description of their design, material and purpose. A list of all products containing hazardous substances/materials must be provided. Table 1 shows an example. Material Safety Data Sheets (MSDS)s of these products must be appended to the Annex A of the EOHSIR – A&E.

DID PREP-005 Continued…

Table 1 Cartridge Components

Major sub-system	Component	Chemical ingredient	CAS #	Quantity (g)	Controls*
* Substances regulated and proposed to be regulated under the *Canadian Environmental Protection Act (CEPA), 1999*; Targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the National Pollutant Release Inventory (NPRI).					

10.2.4.3 Combustion Products: Identify the combustion products associated with the cartridge by component and sub component. The source and method for combustion products identification must also be identified (e.g. combustion products measured or calculated, with accepted method or algorithm provided). These products must be identified by Name, Chemical Abstract Service (CAS) number, Quantity and the Controls (Table 2 illustrates an example).

Table 2 Combustion products

Major Sub-system	Component	Combustion product	CAS #	Quantity (g)	Controls*
* Substances regulated and proposed to be regulated under the *Canadian Environmental Protection Act, 1999*; Targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the NPRI.					

10.2.5 Environmental Assessment

10.2.5.1 This section must provide a discussion of the environmental impacts associated with activities during each life cycle phase (storage, transportation, testing, use, demilitarization and disposal) as follows:

10.2.5.1.1 Life cycle phase / Activity Description: Identify the activity relevant to the lifecycle phase of the ammunition.

10.2.5.1.2 Valued Ecosystem Components (VECs). List all of the VECs that may be affected by the various activities for each life cycle phase. Refer to Table 3. In the left-hand column, list the activities related to the life cycle phases. Examine each place where an activity intersects with an environmental component, and where there is a potential impact, mark an X.

10.2.5.1.3 Environmental Impact

10.2.5.1.4 Describe in detail the predicted impact considering the severity and duration if possible. A clear identification of whether each major component of the ammunition is a source of any of the following aspects should be done:

a. Hazardous gases (source, concentration or quantity);
b. Hazardous liquids (source, concentration or quantity);
c. Hazardous solids (source, concentration or quantity);
d. Noise;
e. Vibration; and
f. Other – any other hazard associated with the specific ammunition

DID PREP-005 Continued…

10.2.5.1.5 Examples of various aspects for activities related to life cycle phases that are typically included in the EOHSIR – A&E discussion are listed on the last page of this template.

10.2.5.1.6 Mitigation Measures: Describe actions to be taken to eliminate or reduce the impact of the component or activity.

10.2.5.1.7 Hazards and Impacts that cannot be evaluated. Identify hazards and impacts that cannot be evaluated due to lack of details respecting a subcomponent and/or an activity of a lifecycle phase.

Table 3 Valued Ecosystem Components

Life cycle phase/ activity	**(Add to/ delete from matrix below as necessary)** Show potential effects with an "X"														
	Physical						**Biological**					**Social**			
	Atmosphere	Surface water	Ground water	Soils	Terrain	Ambient Noise	Terrestrial animals	Terrestrial habitat	Aquatic animals	Aquatic habitat	Vegetation	Recreation	People/health	Services	Land use
Storage															
Transportation															
Testing															
Use															
Demilitarization and disposal															

10.2.5.1.8 Conclusions and recommendations. This section must summarize the significant impacts on the environment identified for each life cycle phase. It should also list recommended mitigation measures and monitoring required. Hazards and impacts that could not be evaluated should also be part of the conclusions, and recommendations for obtaining the necessary information should also be provided as well as the likely mitigation, monitoring, and follow-up, if appropriate.

DID PREP-005 Continued…

10.2.6 Occupational Health and Safety Assessment (EOHSIR – A&E)

10.2.6.1 The purpose of the EOHSIR – A&E is to assess the potential health risks to operators of the ammunition and any bystanders (e.g. training instructors) in the immediate vicinity of its use. The occupational health and safety assessment will:

a. Identify potential health hazards to personnel related to the storage, handling, and operation of the ammunition while in CAF service;

b. Assess the exposure of personnel to the identified health hazards;

c. Characterize the health risks to personnel based on their exposure to the identified hazards; and

d. When necessary, recommend approaches and strategies to mitigate health risks to personnel related to the use of the ammunition.

10.2.6.2 Hazard Identification. Occupational health hazards related to the use of ammunition will typically fall into two broad categories: chemical hazards (e.g. combustion products such as carbon monoxide, heavy metals such as lead, etc.) and physical hazards (e.g. noise, vibration, electromagnetic fields, lasers, etc.).

10.2.6.3 For chemical hazards, consideration must be given both to the chemical constituents of the ammunition (its composition) as well as the chemical products that may be produced when the ammunition is used (e.g. combustion products). Potential chemical hazards that may exist for handlers of the residue of the ammunition (e.g. spent casings) and for personnel involved in the long-term or bulk storage of the ammunition must also be considered.

10.2.6.4 The most ubiquitous physical hazard for ammunition will be noise, specifically impulse noise. However, where applicable, consideration must also be given to other potential physical hazards (e.g. lasers, electromagnetic fields) related to the use of the weapon system.

10.2.6.5 Exposure Assessment. Once the types of hazards have been identified, consideration must then be given to the amount, duration, frequency, and route of potential exposure (e.g. for chemical hazards, inhalation, ingestion, or dermal absorption) to the hazards. Specific details that need to be considered in order to adequately assess exposure to personnel include:

a. What is the impact from a single round of the ammunition (e.g. types and amounts of chemical hazards released, noise characteristics)?

b. What are the conditions that the ammunition can and/or will be used in (e.g. open air, in a trench, from a building, from a vehicle)? *[The worst case scenario would be an enclosed space i.e. culvert, Observation Post, best case open terrain. Snipers will occasionally train in vehicles]*;

c. How many rounds in total would be fired by an operator in a single day, how many days would the operator fire the ammunition in a single year, and how frequently are the rounds fired (e.g. one round per minute for one hour; bursts of 5 to 10 rounds every 10 seconds for 10 minutes)? *[Due to the nature of the ammunition the majority of training would be done with the normal match ammunition. A sniper may fire 5-10 rounds in a range application or on a combat mission, (The sniper would not remain in the same location after engaging the target).]*

d. Will the ammunition be fired from a single weapon when used, or will multiple operators be firing the ammunition in relatively close proximity at the same time? If the latter, then how many operators and what is the separation distance and direction)? *[Assume multiple systems would be used with a separation of approximately 4.5 meters minimum. Could be up to 2 teams consisting of 2 snipers each, 4.5 meters apart, with 1 rifle per team]*;

e. Other than the operator(s) who is/are firing the ammunition, are there bystanders in the immediate vicinity (example. instructors, support personnel, observers) when the ammunition is in use? If yes, then:

DID PREP-005 Continued…

i. What is the bystander distance and direction from the weapon system being used to fire the ammunition? *[The sniper will always have a spotter less than a meter to the 5 o'clock. Instructors would be standing on the firing line within 2m]*; and

ii. How many rounds is the bystander exposed to (rounds fired per day, days per year, firing frequency)? *[The sniper spotter will be exposed to the same amount as the sniper: 5-10 cartridges per day per day, 4 days per year on a quarterly basis]*;

f. With respect to paras 10.2.6.5 (b). to (e)., are there any differences between operational and training scenarios and if so, what are they? *[Operational – potential to engage rapidly with more rounds, less chance of proper hearing protection]*;

g. With respect to paras 10.2.6.5 (b). to (f)., what would be the "typical" scenario and what would be the "worst case" scenario? *[Typical - Range with minimal environmental, physical and mental stressors and the ability to rest between rounds. Worst case – enclosed space, rapid engagements]*; and

h. With respect to chemical hazards only, is there the potential for exposure by a route other than inhalation? For example, does the ammunition contain or release a chemical substance that can be absorbed through the skin.

10.2.6.6 The key consideration for exposure assessment is evaluating exposure at the location of the individual, be it the ammunition operator or bystander. Therefore, for the operator(s) and typical bystander positions, the following information is required:

a. For chemical hazards, the airborne concentration of the chemical (e.g. parts per million, mg/m3) in the breathing zone of the individual. The effects of firing frequency and use conditions (e.g. open air vs. relatively enclosed space with little ventilation, shooter position such as prone vs. standing) will be taken into consideration when determining the airborne concentration. Airborne concentration data should include the mean, maximum, minimum, and standard deviation for both short-term peak exposure and time-weighted average exposure for the duration of time that the ammunition is used;

b. For noise, measurement data is required for different shooter positions (e.g. prone, standing) and applicable ammunition use environments (e.g. open air, trench, inside a structure or vehicle, etc.). The following parameters should be measured at the location of the exposed individual:

i. Peak sound pressure level of the impulse, in units of Pa or dB;

ii. B-duration of the impulse (B-duration is defined as the total time that the envelope of the pressure fluctuations, both positive and negative, are within 20 dB of the peak pressure level), in milliseconds; and

iii. The Sound Exposure Level of the impulse is defined as the level in dBA of a constant sound of one second in duration that contains the same acoustical energy as the actual sound to be measured), in dBA,; and

c. For physical hazards other than noise, Defence Force Health Protection should be consulted to confirm that the applicable measurement parameters are adequate for subsequent risk characterization purposes.

10.2.6.7 Risk Characterization. Risk characterization entails an assessment of human health risk based on the types of hazards and the degree of exposure to those hazards according to potential exposure scenarios. Regulatory standards and occupational exposure limits are considered during the risk characterization process, and professional judgment is required in their application to ammunition use scenarios.

DID PREP-005 Continued…

10.2.6.8 Risk Management. The risk characterization process will determine if the use of the ammunition entails health risks that are acceptable/tolerable or not acceptable/tolerable. In the latter case, recommendations will be made regarding options to mitigate the risk down to acceptable levels, such as engineering controls, administrative controls (e.g. limits on number of rounds fired per day), or personal protective equipment (e.g. use of hearing protective devices, respirators, etc.).

10.2.7 Consultation

10.2.7.1 Internal. This section must list all applicable internal consultations performed in order to produce the EOHSIR – A&E; and

10.2.7.2 External. This section must list all applicable external consultation performed in order to produce the EOHSA.

Annex A - MSDS for controlled products identified in the EOHSIR – A&E.

The following is a tabular listing of aspects that are related to activities during various life cycle phases of ammunition. These aspects and their impacts on the environment are generally discussed in an EOHSIR – A&E. Note that this is not an exhaustive list; aspects that are specific to the munitions being addressed are to be included in the EOHSIR – A&E.

Life cycle phase	Activity	Aspect
Storage and transportation	Accidents such as auto ignition of propellant, overheating of storage facility, car accident, etc.	Gas and particulate emissions, unburned explosives on the soil, etc.
Test and Evaluation	Firing limited numbers of ammunition	Duds, Gas and particulate emissions (firing point, trajectory, impact area) in open air and enclosed areas, Noise, Generated wastes
Use/Operation	Firing large numbers of ammunition	Duds and Unexploded Ordnance, Gas and particulate emissions (firing point, trajectory, impact area) in open air and enclosed areas, Noise, Vibration, Generated wastes
Demilitarization and Disposal	Destruction of surplus or obsolete ammunition by OB/OD or thermal treatment in incinerators or other equipment	Gas and particulate emissions, waste disposal (liquid, solid), Noise

DID PREP-005 Continued…

EOHSIR – A&E conducted by:
(Name, position/title, Company/DND division/directorate, phone number, and email address)

//original signed by//

Signature _____ Date

EOHSIR – A&E reviewed by:
(Name, position/title, phone number, and email address)

//original signed by//

Signature _____ Date

EOHSIR – A&E approved by ASSB Chair:
(Name, title, phone number, and email address)

//original signed by//

Signature _____ Date

DATA ITEM DESCRIPTION		
1. TITLE **Engineering Change Proposals (ECPs)**		2. IDENTIFICATION NUMBER **PROD-001** (CDRL 008)
3. DESCRIPTION Engineering Change Proposals (ECPs) includes both the engineering change and the documentation by which the change is described and suggested. An ECP describes changes to configuration items and associated configuration documentation that are affected by the proposed engineering change. The ECP enables the Contractor and Canada to fully evaluate the proposed engineering change and to authorize or reject the change.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of an ECP as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS DND 672 (Revision 07-95)	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 Engineering Change Proposals (ECPs) must be in the Contractor's own format and as further described herein.

10.1.2 The ECP package must be accompanied by a DND Form 672 (Revision 07-95) Design Change/Deviation.

10.2 Content

10.2.1 The following additional information must be included and detailed for each ECP:

a. General information (i.e. originator, date, class, number, type, priority, revision, title, etc.);

b. Configuration Item Information (CI(s) to which ECP applies) as well as main equipment affected;

c. Current CI production state (if applicable);

d. Impact on baselines, specifications, interfaces, schedules, performance, availability, logistics, etc.;

e. Description of change;

f. Substantiation (need/reason) of change;

g. Costs/Savings details;

h. Trade-offs and/or alternative solutions;

i. Implementation Plan;

j. Additional testing and validation requirements;

k. Date of Approval required; and

l. Authorities (Submitting, Reviewing, Recommending and Approving).

DATA ITEM DESCRIPTION		
1. TITLE **Request for Deviations (RFDs)**		2. IDENTIFICATION NUMBER **PROD-002** (CDRL 009)
3. DESCRIPTION RFDs provide the required details in order to seek authorization, prior to manufacture, to deliver materials not meeting specified requirements. The RFD must fully enable Canada to evaluate, for authorization, the item not conforming to Contractual requirements with respect to the impact on performance, availability, logistics support and any other affected areas.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of an RFD as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS DND 672 (Revision 07-95)	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 RFDs must be in the Contractor's own format and as further described herein.

10.1.2 The RFD package must be accompanied by a DND Form 672 (Revision 07-95) Design Change/Deviation.

10.2 Content

10.2.1 The following additional information must be included and detailed for each RFD:

a. General information (i.e. originator, date, Requests for Deviation number, designation, title, etc.);

b. Configuration Item Information (CI(s) to which the RFD applies) as well as main equipment affected;

c. Impact on performance, availability, logistics, training, specifications, interfaces and any other affected areas;

d. Description of deviation;

e. Substantiation (need/reason) of deviation;

f. Additional testing and validation requirements; and

g. Authorities (Submitting, Reviewing, Recommending and Approving).

DATA ITEM DESCRIPTION		
1. TITLE **Request for Waivers (RFWs)**		2. IDENTIFICATION NUMBER **PROD-003** (CDRL 010)
3. DESCRIPTION RFWs provide the required details in order to seek authorization to deliver manufactured materials, or currently being manufactured, not meeting specified requirements. The RFW enables Canada to fully evaluate, for authorization, the item not conforming to Contractual requirements with respect to the impact on performance, availability, logistics support, interfaces and any other affected areas.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of an RFW as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS DND 675 (Revision 03-02)	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 RFW's must be in the Contractor's own format and as further described herein.

10.1.2 The RFW package must be accompanied by a DND Form 675 (Revision 03-02) Request for Waiver.

10.2 Content

10.2.1 The following additional information must be included and detailed for each RFW:

a. General information (i.e. originator, date, RFW number, designation, title, etc.);

b. Configuration Item Information (CI(s) to which Requests for Waiver applies) as well as main equipment affected;

c. Impact on performance, availability, logistics, training, specifications, interfaces and any other affected areas;

d. Description of waiver;

e. Substantiation (need/reason) of waiver;

f. Corrective actions taken;

g. Extent of manufacturing of non-conformance; and

h. Authorities (Submitting, Reviewing, Recommending and Approving).

DATA ITEM DESCRIPTION		
1. TITLE **First Article Test (FAT) Report**		2. IDENTIFICATION NUMBER **PROD-004** (CDRL 011)
3. DESCRIPTION The FAT Report formally documents all of the results and conclusions from testing and re-testing completed during FAT for the pilot lot production.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the FAT Report as required in the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Contractor's own format is acceptable.

10.2 Content

10.2.1 The FAT Report must include and detail the following:

a. A coversheet showing the signatures and dates of the required Contractor Authorities for approval including the Quality Assurance Manager and the Test Officer;

b. Table of Contents;

c. A summary table of tests that were conducted during FAT that includes:

i. Test Title;

ii. Sample Sizes; and

iii. Reference to the technical specification by paragraph number.

d. A summary table that provides an overview of the FAT results, clearly indicating the following:

i. Test Title;

ii. Environment (Temperature, etc.);

iii. Sample Size;

iv. Requirement/Sentencing Criteria;

v. Results; and

vi. Test Status: PASS/FAIL

e. A section that addresses each identified test with the following information:

i. Test title and identification;

ii. Test description and procedure;

iii. Test equipment description with photograph or diagram of setup;

iv. Location of test or facility;

v. Test Authority, test officer and any other participants;

vi. Details of any deviations from procedure or criteria;

vii. Summary of results: Summary of all test data and calibrations with sample calculations with applicable graphs, charts, test data, illustrations, digital photographs and/or video recordings;

viii. Conclusions: Identify pass/fail results and provide an analysis of the failed test results;

DID PROD-004 Continued…

ix. Recommendations, explanations, decisions and remedial actions for partially met requirements and test failures. The Contractor must propose corrective action for any test failures in the report.

f. Test Data Annexes: The Contractor's formal test data sheets used to collect test data for each test must be included as separate annexes to the FAT report. Each data sheet must include the raw data, sentencing, tester remarks/observations, indication of pass/fail, test date, name of the tester and signature of the tester.

g. If a partial retest was conducted, the resubmitted FAT report must reflect this information as addendums to the applicable sections in order to preserve the history of the FAT for the affected lot.

DATA ITEM DESCRIPTION		
1. TITLE **Lot Acceptance Test (LAT) Reports**		2. IDENTIFICATION NUMBER **PROD-005** (CDRL 012)
3. DESCRIPTION The LAT Report formally documents all of the results from testing completed for each lot of cartridges produced during serial production.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of LAT Reports as required in the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Contractor's own format is acceptable.

10.2 Content

10.2.1 The LAT Test Report must include and detail the following:

a. A coversheet showing the signatures and dates of the required Contractor Authorities for approval including the Quality Assurance Manager and the Test Officer;

b. Table of Contents;

c. A summary table of tests that were conducted during LAT that includes:

i. Test Title;

ii. Sample Sizes; and

iii. Reference to the technical specification by paragraph number.

d. A summary table that provides an overview of the LAT results, clearly indicating the following:

i. Test Title;

ii. Environment (Temperature, etc.);

iii. Sample Size;

iv. Requirement/Sentencing Criteria;

v. Results; and

vi. Test Status: PASS/FAIL

e. A section that addresses each identified test with the following information:

i. Test title and identification;

ii. Test description and procedure;

iii. Test equipment description with photograph or diagram of setup;

iv. Location of test or facility;

v. Test Authority, test officer and any other participants;

vi. Details of any deviations from procedure or criteria;

vii. Summary of results: Summary of all test data and calibrations with sample calculations with applicable graphs, charts, test data, illustrations, digital photographs and/or video recordings;

viii. Conclusions: Identify pass/fail results and provide an analysis of the failed test results;

DID PROD-005 Continued…

ix. Recommendations, explanations, decisions and remedial actions for partially met requirements and test failures. The Contractor must propose corrective action for any test failures.

f. Test Data Annexes: The Contractor's formal test data sheets used to collect test data for each test must be included as separate annexes to the LAT report. Each data sheet must include the raw data, sentencing, tester remarks/observations, indication of pass/fail, test date, name of the tester and signature of the tester.

g. If a second sample or partial retest was conducted, the LAT report must reflect this information as addendums to the applicable sections in order to preserve the history of the LAT for the affected lot.

DATA ITEM DESCRIPTION		
1. TITLE **Failure Investigation Reports**		2. IDENTIFICATION NUMBER **PROD-006** (CDRL 014)
3. DESCRIPTION The Failure Investigation Report formally documents all failures/deficiencies related to quality assurance, safety, suitability and reliability issues found during trials and evaluations.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the Failure Investigation Reports as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Contractor's own format is acceptable.

10.2 Content

10.2.1 The Failure Investigation Report must include, but is not limited to, the following:

a. Description of failure, including photos and images;

b. Circumstances in which the failure occurred;

c. Discussion and findings of the investigations, including tests and analysis that may have been performed, supported by data;

d. Conclusions, recommendations and options or solutions; and

e. Risk and impact statements against each recommended option or solution.

DATA ITEM DESCRIPTION		
1. TITLE **Material Safety Data Sheet (MSDS)**		2. IDENTIFICATION NUMBER **ILS-001** (CDRL 015)
3. DESCRIPTION The MSDS is a technical bulletin that provides specific hazard information, safe handling information, and emergency procedures for a controlled product.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the MSDN as required in the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 The MSDS must meet the applicable content requirements in accordance with Health Canada Controlled Products regulations (CPR). Specifically, the MSDS must meet section and sub-sections 12 of the CPR concerning Information to be disclosed on a Material Safety Data Sheet.

10.2 The MSDS must be provided in both English and French.

DATA ITEM DESCRIPTION		
1. TITLE **Supplementary Provisioning Technical Documentation (SPTD)**		2. IDENTIFICATION NUMBER **ILS-002** (CDRL 016)
3. DESCRIPTION The SPTD provides Canada with the required documentation to uniquely identify the complete Sniper Cartridge, sub-assemblies, integral parts and related packaging configurations. This SPTD may be used to catalogue specific items and to assign NATO Stock Numbers.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of SPTD as required in the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 The following SPTD must be provided for the Sniper Cartridge, sub-assemblies, integral parts and related packaging configurations where required:

a. Item Name;

b. Manufacturer’s Reference Number;

c. Part Number;

d. NCAGE Code;

e. Configuration - drawing of packaged items;

f. Technical specification, including relevant standards;

g. Performance data, including the environmental and operating conditions under which the item must perform;

h. Special features which contribute to the uniqueness of the item;

i. Physical characteristics, such as dimensions, tolerances, materials, mandatory processes, surface finish, protective coating; and

j. Commercial catalogue data.

DATA ITEM DESCRIPTION		
1. TITLE **Logistic Data Sheet**		2. IDENTIFICATION NUMBER **ILS-003** (CDRL 017)
3. DESCRIPTION The Logistic Data Sheet provides input to the Type Classification Summary Report required for the equipment manager.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the Logistic Data Sheet as required in the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 Logistic Data Sheet data must be provided in a tabular format.

10.2 Content

10.2.1 Logistic Data must consist of the following data:

a. Description / nomenclature;

b. NATO Stock Number (Cartridge);

c. Applicable Weapons;

d. Dimensions (All up cartridge, and sub components - Projectile, Casing, propellant and Primer).

e. Projectile Specific: Nominal caliber size, length and mass;

f. Weights for Cartridge and Cartridge sub-components (Including complete cartridge, projectile, casing, propellant charge weight and primer);

g. Net Explosive Quantity (NEQ) per single cartridge;

h. Part Number;

i. Manufacturer including NCAGE;

j. HCC and UN;

k. Shelf Life with note as to how it was determined and the required conditions;

l. Storage Temperature Limitations;

m. Operating Temperature Limitations;

n. Component list (e.g. explosive, propellant, primer and others);

o. UN Hazard Classification Certificate – NRCAN Reference Number (NRCAN#);

p. UN Hazard Classification Certificate – US DOT Reference Number (EX#);

q. Demilitarization Code;

r. Proper Shipping Name;

s. Packaging description;

t. Package data including: qty (items/pack), weight (kg), NEQ/pack, dimensions (cm/m);

u. Pallet data including: qty (pack/pallet), weight (kg), NEQ/pallet, dimensions (m);

v. Hazardous Materials/Dangerous goods identification other than explosives if applicable (e.g. gases, flammable liquids, toxic substance, etc.).

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DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
Ballistic Support Documentation	**ILS-004** (CDRL 018)

3. DESCRIPTION

The Ballistic Support Documentation provides safety and range planning information for the use of the ammunition in the field and on CAF ranges.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of the Ballistic Support Documentation as required in the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 Firing tables provided in the Ballistic Support Documentation must be provided in tabular format.

10.1.2 Danger Area Templates provided in the Ballistic Support Documentation must be presented as full page (letter sized) diagrams.

10.2 Content

10.2.1 Ballistic Support Documentation must consist of the following data:

10.2.1.1 Firing Tables

10.2.1.2 All firing table data, where applicable, must be based on the C21 weapon platform configuration including optical sight arrangement and barrel design (length, twist rate and number of grooves). **Technical data for the C21 will be provided by Canada.**

10.2.1.2.1 Sight compensated firing tables

10.2.1.2.1.1 Sight compensated firing tables at standard atmospheric conditions, with no wind, must be provided for the C21 weapon platform with the following data starting from 0m out to 2500m at 50m increments:

a. Range (m);

b. Time of Flight (seconds);

c. Drift (Mils/MOA);

d. Remaining Velocity (m/s);

e. Remaining Energy (Joules); and

f. Trajectory/Bullet Drop (cm, Mils, MOA).

10.2.1.2.1.2 The Trajectory information must assume zero at 100m.

10.2.1.2.2 Elevation Firing Tables

10.2.1.2.2.1 Elevation firing tables must be provided that indicate the barrel elevation to reach a target at the same level as that of the muzzle (no optical sight offset and no zero point). The elevation firing table must be provided for the C21 weapon platform with the following data starting from 0m out to 2500m at 50m increments:

a. Range (m);

b. Barrel Elevation (Mils);

c. Time of Flight (seconds);

d. Drift (Mils);

DID ILS-004 Continued…

e. Vertex – Range and Height (m);

f. Remaining Velocity (m/s); and

g. Angle of Fall (Mils).

10.2.1.2.3 Table of Corrections

10.2.1.2.3.1 A Table of corrections for non-standard atmospheric conditions must be provided that provides corrections for variations in muzzle velocity, air temperature, air density, spin drift and wind speeds (head, tail and cross).

10.2.2 Danger Area Template

10.2.2.1 A Danger Area Template must be provided that has been developed IAW ARSP-01, Volume II, Weapon Danger Area Areas / Zones for Unguided Weapons for Use by NATO Forces in a Ground Role.

10.2.2.2 The Ballistic Support Data must detail the process, testing and analysis that was conducted in order to form the danger area template.

10.2.3 Projectile Model Information

10.2.3.1 Information about the projectile required to perform PRODAS simulations and for use with ballistic calculators must be provided including:

a. G7 coefficient (all data that is available, average, specific within range);

b. Mass of projectile;

c. Axial inertia;

d. Transverse inertia;

e. Length;

f. Diameter;

g. Position of center of gravity; and

h. Muzzle velocity (0m) from the C21 weapon platform.

DATA ITEM DESCRIPTION

1. TITLE	2. IDENTIFICATION NUMBER
Ammunition and Explosives Technical Information Publication, .338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge and C21 Data	**ILS-005** (CDRL 019)

3. DESCRIPTION

This DID describes the format and content for developing the Ammunition and Explosives Technical Information, Sniper Cartridge, 0.338 Lapua Magnum Armour Piercing Incendiary publication.

4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST	6. GIDEP APPLICABLE
	DSSPM 9	

7. APPLICATION / INTERRELATIONSHIP

This DID contains instructions for the preparation of Technical Publications as required in the SOW.

8. ORIGINATOR	9. APPLICABLE FORMS
	DND 2515 Certificate of Translation Accuracy Check (TAC)

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The publication must be done IAW the following:

a. D-01-002-000/SG-000, Standard for Ammunition and Explosives Technical Information Documents; and

b. C-01-100-100/AG-006 Specification Writing, Format and Production of Technical Publications

10.1.2 The final and Canada approved version of the publication must be provided in the following soft copies:

a. Master Document Files. The Master Document Files are the electronic master of the completed publication. Master document files must be delivered in Microsoft Word. All blank pages, figures, illustrations and foldouts must be imbedded within the file(s). These files are considered the “Master Document” files for present and future revision, changes and/or re-use. The master document files may be broken down into a number of folders and sub-files in order to ensure the file sizes can be managed on the normal office word processor. Files should be broken at logical page locations to ensure future ease of use. This would normally occur at the end of a part/chapter or section.

b. Master Image Files. All illustrations (Figures) must be delivered as separate individual Tagged Image File Format images in accordance with Adobe Systems Inc. specification.

c. Master Read Only Files. Using the completed Master Document file(s), the Contractor must provide a Portable Document Format (PDF) file that must contain the complete publication (with changes incorporated as applicable). This file(s) is considered the “master read only” file for printing/reproduction viewing purposes. The master read only file is not a replacement for the master document files or the master image files. All pages contained in the PDF file must be contain searchable text and oriented such that they do not require rotation when viewing. This file must contain “thumbnails” of each of the pages. The Contractor must ensure that a quality check is done on the PDF file to verify that the content reflects the content/formatting as the Master Document file and the Reproducible copy.

10.1.3 For the English draft and the English validated manuals, the Contractor must provide a soft copy in MS Word format.

10.2 Content

10.2.1 Technical Content

10.2.1.1 The publication must be contain the required information and technical data as required by D-01-002-000/SG-000, Standard for Ammunition and Explosives Technical Information Documents, for the Sniper Cartridge and the C21 weapon platform. Canada will provide the required data for the C21 weapon platform for incorporation into the Publication.

DID ILS-005 Continued…

10.2.1.2 The Contactor must also update, as required, the changed pages page, table of contents, section and sub-section numbering, paragraph numbering and other document related features affected by the updated information.

10.2.2 Bilingual Content

10.2.2.1 General

10.2.2.1.1 The publication content must be in both French and English and meet the official language requirements following the guidelines of A-LM-505-010/JS-001, Official Languages Requirements for Technical Documentation. All changes to bilingual publications must be translated and issued simultaneously. The language quality of the translation must be consistent with and equivalent to the source text and must be suited to the typical user/technician's ability in the language (Refer to C-01-100-100/AG-006).

10.2.2.2 Translation Accuracy Check

10.2.2.2.1 All bilingual submissions must be accompanied by a TAC IAW C-01-100-100/AG-006 signed by the Contractor, certifying the accuracy of the translated text.

10.2.2.3 Cover Page

10.2.2.3.1 The Contractor must insert a Canadian Forces Technical Order cover page on all publications whether existing, revised or new.

10.2.2.4 The publication must be the “Copyright of the Crown / DND”.

DATA ITEM DESCRIPTION		
1. TITLE **Project Schedule**		2. IDENTIFICATION NUMBER **PM-001** (CDRL 020)
3. DESCRIPTION The Project Schedule is a Microsoft Project tracking Gantt chart that contains all of the major project activities integrated with invoicing milestones and organized in such a way that the work flow is intuitive, tasks are detailed down to the work package level, tasks that have any interdependencies are linked and the critical path links all important activities.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DSSPM 9	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains instructions for the preparation of the Project Schedule as required by the SOW.		
8. ORIGINATOR	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 Format

10.1.1 The Project Schedule must be prepared using Microsoft Project.

10.2 Content

10.2.1 All project activities and invoicing milestones must be contained in a single MS Project file organised such that the work flow is intuitive, tasks are detailed to the work package level, tasks that have any interdependencies are linked and the critical path links all important activities.

10.2.2 The project schedule must include all contracted activities, deliverables and milestones and must detail the sequencing, activity duration, milestones and all work breakdown activities, which occur for the objectives and requirements of the Contract to be achieved. The schedule must integrate the expected invoicing milestones and timing for all payments against the Contract.

10.2.3 The project schedule must show a time-phased sequence of activities and events, and their relationship to the work breakdown activities, to include as a minimum:

a. The sequence, duration and completion dates of activities and deliverable items;

b. Critical Path(s);

c. Program tasks down to the work package level;

d. Associated project milestones (expected invoices, contractual and otherwise);

e. Delivery of associated documentation for review, approval and final delivery;and

f. Projected dates for any major project accomplishments not already covered as milestones.

ANNEX A-2

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

PERFORMANCE SPECIFICATION

Reference Number: W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
National Defence Headquarters
Major General George R. Pearkes Building
Ottawa, Ontario
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NOTICE
This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

Contents

1 Introduction

1.1 Scope

1.1.1 This performance specification states the requirements for the .338 Lapua Magnum Armour Piercing Incendiary sniper cartridge (Sniper Cartridge).

1.1.2 This document and its various appendices form the basis for all verification activities to be performed on the Sniper Cartridge.

1.2 Background

1.2.1 The ammunition detailed in this Performance Specification will be used with the C21 Multi-Caliber Sniper Weapon (MCSW) chambered in the NATO 7.62mm x 51 and .338 Lapua Magnum calibers. Unless otherwise stated, testing and validations for S3 and System Acceptance Testing (SAT) will be conducted using this weapon platform.

2 Acronyms

ASSB	Ammunition Safety and Suitability for Service Board
AOP	Allied Ordnance Publication
CAF	Canadian Armed Forces
CIP	Commission internationale permanente pour l'épreuve des armes à feu portatives
DND	Department of National Defence
HCC	Hazard Classification Code
IAW	In Accordance With
IHL	International Humanitarian Law
MCMOPI	Multi-Caliber Manual of Proof and Inspection
MCSW	Multi-Caliber Sniper Weapon
MOA	Minute of Angle
NATO	North Atlantic Treaty Organization
RH	Relative Humidity
S3	Safety and Suitability for Service
SAAMI	Sporting Arms and Ammunition Manufacturers' Institute
SAT	System Acceptance Test
STANAG	Standardization Agreement

3 Terminology

3.1 “Article 36 Legal Review” refers to a review conducted by the Directorate of International and Operational Law to ensure that Canadian Armed Forces (CAF) weapon systems comply with those limits imposed by international laws and conventions to which Canada is a signatory.

3.2 “Ammunition Safety and Suitability for Service Board (ASSB) Phase 1 Decision Document” is used to assess whether the S3 test program proposed for a new munition is appropriate and complete with respect to the declared service life cycle.

3.3 “C21” means the CAF selected multi-caliber sniper weapon platform in the NATO 7.62mm x 51 and .338 Lapua Magnum and calibers.

3.4 “Defects and Incidents” means those defects and incidents that fall within Categories 1 through 4 in accordance with (IAW) the MCMOPI, AC/225(DSS)D(2013)0014(PFP), Section 11.

3.5 “Extreme High Operational Conditions” is defined as:

a. Temperature: +52°C;

b. Relative Humidity (RH): Between 3% and 8%; and

c. Atmospheric Pressure: 96 +/-10KPa.

3.6 “Extreme High Storage Conditions” is defined as:

a. Temperature: +71°C;

b. RH: 3% to 8%; and

c. Atmospheric Pressure: 96 +/-10KPa.

3.7 “Extreme Low Operational Conditions” is defined as:

a. Temperature: -54°C;

b. RH: Tending towards saturation; and

c. Atmospheric Pressure: 96 +/-10KPa.

3.8 “Extreme Low Storage Conditions” is defined as:

a. Temperature: -51°C;

b. RH: Tending towards saturation; and

c. Atmospheric Pressure: 96 +/-10KPa.

3.9 “Extreme Spread” is defined as the distance between the two farthest impact points within a single grouping of shots. This is measured from the center of impact of each shot.

3.10 “Lot” means a quantity of ammunition which is manufactured or assembled by one producer under uniform conditions and which is expected to function in a uniform manner. An ammunition Lot is designated and identified by assignment of an ammunition lot number. Materiel comprising an ammunition Lot must be homogeneous.

3.11 “Minute of Angle (MOA)” is as an angular measurement defined as 1/60th of a degree. 1 MOA spreads 2.9cm at a range of 100m.

3.12 “Standard Ambient Conditions” is defined as:

a. Temperature: 21°C +/- 5°C;

b. RH: 50% +/- 15%; and

c. Atmospheric Pressure: 96 +/-10KPa.

3.13 “Temperature Tolerance” for all temperatures is ±2°C unless otherwise stated.

4 Applicable Documents

4.1 Applicability

4.1.1 Unless otherwise stated, the most recent version of the documents listed below, at the time of Contract award, form part of this Performance Specification when specifically referenced in the text. All other document references are to be considered supplemental information only. Unless otherwise specified, the issue, amendment and version of documents effective for this Contract will be those in effect at Contract award. The Contractor must bring to the attention of Canada, through the Contract Authority, all inconsistencies between the Performance Specification and the documents attached in the Annexes and referenced in this document. In the event of conflict between the content of this Performance Specification and the referenced documents, the following order of precedence applies:

a. Applicable Canadian laws and regulations;

b. The Contract;

c. Content of the Statement of Work (Annex A-1) and appendices; and

d. This performance specification and appendices.

4.2 Commercially Available Documents

4.2.1 AOP-2(C), The Identification of Ammunition [https://www.nato.int/];

4.2.2 MIL-DTL-3060G (AR), Detail Specification, Boxes, Small Arms Ammunition – M19A1, M2A1 and M2A2 [https://global.ihs.com/];

4.2.3 Multi-Caliber Manual of Proof and Inspection (MCMOPI): AC/225(DSS)D(2013)0014(PFP) [https://www.nato.int/].

4.3 Government Supplied Documents

4.3.1 D-09-002-003/SG-000 Specification for Palletization of Ammunition; and

4.3.2 D-09-002-004/SG-000 Standard, Identification of Ammunition and Ammunition Packaging.

5. Requirements

5.1 Calibre

5.1.1 .338 Lapua Magnum. The Sniper Cartridge must be IAW the .338 Lapua Magnum cartridge as defined by Commission internationale permanente pour l'épreuve des armes à feu portatives (CIP)/ Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) standards in terms of dimensions, pressure and headspace. The CIP table of dimensions and pressures for the .338 Lapua Magnum cartridge can be found at https://bobp.cip-bobp.org/uploads/tdcc/tab-i/338-lapua-mag-en.pdf; and

https://bobp.cip-bobp.org/uploads/annexe/annexeiii-en-cr1.pdf.

5.1.2 Compatibility with Weapons. The Sniper Cartridge must function properly and safely when used with weapons chambered for .338 Lapua Magnum.

5.2 Cartridge Design

5.2.1 Projectile Sub-Component. The Sniper Cartridge must incorporate an armour piercing, incendiary, match projectile that complies with the treaties and conventions to which Canada is a signatory to and other obligations under International Humanitarian Law (IHL) and customary international law.

5.2.2 Primer Sub-Component. The Sniper Cartridge must use a percussion primer that is safe for military use.

5.2.3 Propellant. The Sniper Cartridge must use a propellant that is safe for military use.

5.3 Compatibility

5.3.1 C21 Compatibility. The Sniper Cartridge must be compatible with all operational and non-operational aspects of the C21.

5.4 Function Casualty

5.4.1 C21 Function and Casualty. The Sniper Cartridge must operate safely and reliably in the C21 at the Extreme High & Low Operational and Standard Ambient Conditions without experiencing Defects and Incidents that exceed the C21 Function Casualty Requirement as defined in Test 2 of the SAT Requirements (Appendix 1 of this Annex).

5.5 Precision

5.5.1 Precision. The Sniper Cartridge must achieve a mean Extreme Spread of 1.5 MOA or less when fired against a target at 300m at +21°C IAW the Precision Test Procedure (paragraph 5.5.2).

5.5.2 Precision Test Procedure. The precision test must be conducted as follows:

a. Three x .338 Lapua Magnum precision test barrels must be used;

b. The test ammunition must be stored at +21 ± 3°C, for not less than 6 hours and must be fired at that temperature;

c. Each precision test barrel must fire at 5 targets located at 300m (15 targets total);

d. group of 5 rounds must be fired into each separate target (75 cartridges total); and

e. The Extreme Spread of each target (15 targets total) must be calculated independently and then averaged with the other targets to obtain the mean Extreme Spread.

5.6 Velocity

5.6.1 Velocity Variation. The muzzle velocity standard deviation of the projectile must be less than 6m/s for 20 cartridges conditioned at 21°C.

5.7 Terminal Effects

5.7.1 Terminal Effects. The Sniper Cartridge projectile, when striking at a 0 degree angle of obliquity (normal to the line of fire), must completely penetrate a 10mm thick steel plate with a Brinell Hardness of 400, 100% of the time when fired from a .338 Lapua Magnum precision test barrel that is no longer than 686mm at a range of 500m.

5.7.2 Behind Armour Effects. Following penetration of the steel target at paragraph 5.7.1, the Sniper Cartridge projectile, or fragments of the projectile, must penetrate a 1.25mm mild steel plate at 10cm opposite the armour strike surface.

5.7.3 Incendiary Effects. The Sniper Cartridge projectile must produce incendiary effects capable of igniting vaporized fuel.

5.8 Environmental Requirements

5.8.1 Operational Environment. The Sniper Cartridge will be used for CAF sniper operations and training exercises. Therefore it will be exposed to, and must operate in a wide variety of extremely demanding environments and operational situations ranging from urban areas, through dense vegetation to open savannah and desert. It will be transported by sniper units deployed on foot, in wheeled or tracked vehicles on roads and cross country, in naval craft, helicopters and by parachute. It must remain operable in almost all weather conditions and in climatic zones ranging from hot, dry desert to high arctic conditions.

5.8.2 Storage and Handling - Extreme High Storage Conditions. The Sniper Cartridge must meet its performance requirements and function safely following no less than 72 hours of storage at the defined Extreme High Storage Conditions.

5.8.3 Storage and Handling - Extreme Low Storage Conditions. The Sniper Cartridge must meet its performance requirements and function safely following no less than 72 hours of storage at the defined Extreme Low Storage Conditions.

5.8.4 Operational – Standard Ambient Conditions. The Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Standard Ambient Conditions.

5.8.5 Operational – Extreme High Operational Conditions. The Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Extreme High Operational Conditions.

5.8.6 Operational – Extreme Low Operational Conditions. The Sniper Cartridge must meet its performance requirements and function safely when operated in the C21 at Extreme Low Operational Conditions.

5.8.7 Operational Temperature Conditioning. For requirements 5.8.4, 5.8.5 and 5.8.6 of this document, the Sniper Cartridges under test must be exposed to the

specified conditions for 72 hours prior to testing.

5.8.8 Waterproof. Untreated Sniper Cartridges must be waterproof in accordance to the test procedure and sentencing criteria of the MCMOPI: AC/225(DSS)D(2013)0014(PFP), Section 27.

5.9 Maintainability and Reliability

5.9.1 Shelf Life - Packaged. The Sniper Cartridge must have a packaged shelf life of at least 10 years when stored at the Standard Ambient Conditions.

5.10 Safety and Suitability for Service (S3)

5.10.1 Ammunition Safety and Suitability for Service Board (ASSB). The authority for certifying ammunition rests with the Department of National Defence (DND)'s ASSB. While DND retains the responsibility to satisfy the ASSB, the Contractor is responsible for the Sniper Cartridge to successfully meet the requirements of the ASSB Phase 1 Decision Document which includes sequential and non-sequential tests, environmental requirements and legal assessments.

5.10.2 Safety and Suitability for Service - Sequential Test Program. The Sniper Cartridge must meet all of the specified sentencing criteria and remain safe and suitable for service following exposure to the environmental sequential test program detailed in Appendix 2 of this Annex.

5.10.3 Safety and Suitable for Service - Non-Sequential Test Program. The Sniper Cartridge must meet all of the specified sentencing criteria and requirements of the non-sequential test program detailed in Appendix 3 of this Annex.

5.10.4 International Humanitarian Law (IHL) Provisions. The Sniper Cartridge must comply with all conventions, treaties and other obligations under IHL to which Canada is a signatory to and successfully pass an Article 36 Review by CAF Judge Advocate General / Directorate of International and Operational Law.

5.10.5 Hazard Classification Code (HCC). The packaged Sniper Cartridge must have an HCC of 1.4.

5.10.6 Environmental, Health and Safety. All identified environmental and occupational health risks identified against the Sniper Cartridge must be reduced to the satisfaction of Defence Force Health Protection and Director Land Equipment Program Staff.

5.11 Packaging and Palletized Unit Loads

5.11.1 Packaging Configuration. The Sniper Cartridges must be packaged and shipped in steel M2A1 ammunition boxes (MIL-DTL-3060G (AR)).

5.11.2 Inner Packaging Configuration. The inner packaging must consist of separate or individual "satellite" packages that hold 10 Sniper Cartridges each (2 rows of 5 cartridges).

5.11.3 Inner Packaging Quantity. The inner packaging must be configured so that at least a quantity of 200 Sniper Cartridges can be shipped in a single M2A1 box.

5.11.4 Protection Against Handling and Transportation. The Sniper Cartridges must remain safe and suitable for use and meet the specified performance requirements following exposure to the sequential test program detailed in Appendix 2 of this Annex.

5.11.5 Palletized Unit Load. The Sniper Cartridges must be packaged and palletized on standard pallets IAW D-09-002-003/SG-000, Specification for Palletization of Ammunition.

5.12 Marking and Identification

5.12.1 Marking and Colour of Ammunition and Packaging. The Sniper Cartridge and its inner and outer packaging must be marked for identification IAW D-09-002-004/SG-000, Standard, Identification of Ammunition and Ammunition packaging and AOP-2(C), The Identification of Ammunition, where applicable.

5.12.2 M2A1 Ammunition Box Markings. The M2A1 ammunition box must be marked IAW the marking instructions contained in Annex C

5.12.3 Descriptive Nomenclature. The outer and inner packaging must clearly identify the contents with the following descriptive nomenclature: “Cartridge, .338 Lap Mag Armour Piercing Incendiary Match”.

5.12.4 Bullet Nature Symbol. The outer and inner packaging must be marked with the “Armour Piercing Incendiary” symbol IAW Annex B, Page 1 of AOP-2(C).

5.12.5 Marking of Cartridge Casing. The following must be stamped into the base of the Sniper Cartridge casing:

a. The manufacturer’s initials or identification letters;

b. Last two digits of the year of manufacture of the complete round or, if within one year of delivery, the last two digits of the year of manufacture of the casing.

APPENDIX 1 to ANNEX A-2

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

SYSTEM ACCEPTANCE TEST REQUIREMENTS

Reference Number: W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
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Ottawa, Ontario
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CONTENTS

1 Scope

1.1 Objective

1.1.1 The objective of this appendix is to describe the System Acceptance Testing (SAT) that will be conducted by Canada to:

a. Verify that the 0.338 Lapua Magnum Armour Piercing Incendiary Sniper Cartridge (Sniper Cartridge) is compatible with the C21 multi-calibre sniper weapon in Extreme High & Low Operational and Standard Ambient Conditions; and

b. To characterize the precision of the Sniper Cartridge when used with the C21.

1.2 Acronyms and Definitions

IAW	In Accordance With
MCMOPI	Multi-Caliber Manual of Proof and Inspection
MOA	Minute of Angle
NATO	North Atlantic Treaty Organization
OACL	Overall Cartridge Length
RH	Relative Humidity
SAT	System Acceptance Test
SOW	Statement of Work

1.3 Definitions

1.3.1 “C21” means the CAF selected multi-calibre sniper weapon platform in the 0.338” Lapua Magnum and NATO 7.62mm x 51 calibers.

1.3.2 “Defects and Incidents” means those defects and incidents that fall within Categories 1 through 4 IAW the MCMOPI, AC/225(DSS)D(2013)0014(PFP), Section 11.

1.3.3 “Extreme High Operational Conditions” is defined as:

a. Temperature: +52°C;

b. Relative Humidity (RH): Between 3% and 8%; and

c. Atmospheric Pressure: 96 +/-10KPa.

1.3.4 “Extreme Low Operational Conditions” is defined as:

a. Temperature: -54°C;

b. RH: Tending towards saturation; and

c. Atmospheric Pressure: 96 +/-10KPa.

1.3.5 “Extreme Spread” is defined as the distance between the two farthest impact points within a single grouping of shots.

1.3.6 “Minute of Angle (MOA)” is as an angular measurement defined as 1/60th of a degree. 1 MOA spreads 2.9 cm at a range of 100 m.

1.3.7 “Sniper Cartridge” means the .338” Lapua Magnum Armour Piercing Incendiary Sniper Cartridge.

1.3.8 “Standard Ambient Conditions” is defined as:

a. Temperature: 21°C +/- 5°C;

b. RH: 50% +/- 15%; and

c. Atmospheric Pressure: 96 +/-10KPa.

2 Applicable Documents

2.1 Applicability

2.1.1 Unless otherwise stated, the most recent version of the documents listed below, at the time of Contract award, form part of this Statement of Work (SOW) when specifically referenced in the text of the SOW. All other document references are to be considered supplemental information only. Unless otherwise specified, the issue, amendment and version of documents effective for this Contract will be those in effect at Contract award. The Contractor must bring to the attention of the Technical Authority through the Contract Authority all perceived inconsistencies between the SOW and the documents attached in the Annexes and referenced in this SOW. In the event of conflict between the content of this SOW and the referenced documents, the following order of precedence applies:

a. Applicable Canadian laws and regulations;

b. The Contract;

c. Content of the SOW and appendices; and

d. The Performance Specification and appendices.

2.2 Commercially Available Documents

a. Multi-Calibre Manual of Proof and Inspection (MCMOPI) AC/225(DSS)D(2013)0014(PFP).

3 SAT Requirements

3.1 Summary of Tests

3.1.1 The following requirements will be verified during SAT:

SAT No.	SAT Title	Reference	Requirement to be Verified
1	C21 Compatibility	Annex A-2 Para 5.3.1	The Sniper Cartridge must be compatible with all operational and non-operational aspects of the C21.
2	C21 Function Casualty	Annex A-2 Para 5.4.1	The Sniper Cartridge must operate safely and reliably in the C21 at the Extreme High & Low Operational and Standard Ambient Conditions without experiencing Defects and Incidents that exceed the C21 Function Casualty Requirement as defined in Test 2 of the SAT Requirements below
3	C21 Precision	Test Requirement below para 3.4.	The Sniper Cartridge will be tested for precision using the C21.

3.2 Test 1 C21 Compatibility

3.2.1 Aim

3.2.1.1 To confirm that the Sniper Cartridge is compatible with all operational and non-operational aspects of the C21 IAW Annex A-2, paragraph 5.3.1.

3.2.2 Procedure

a. 2 x C21 weapons (Test Weapon 1 and Test Weapon 2) will be inspected, gauged and fired using 5 rounds of CAF in-service .338” Lapua Magnum cartridges to confirm serviceability;

b. A sample of 40 Sniper Cartridges will be removed from their packaging, visually inspected and the Overall Cartridge Lengths (OACL) measured and recorded;

c. 10 Sniper Cartridges will be loaded into a C21 magazine, inserted into Test Weapon 1 and cycled through the weapon without firing (fully chambering and ejecting each cartridge). Repeat for the Test Weapon 2;

d. Inspect all cartridges for damage, witness marks (example: pre-engraving) and OACL; and

e. Operational compatibility with the C21 will be assessed during the function casualty testing (Test 2).

3.2.3 Sentencing Criteria

3.2.3.1 The Sniper Cartridge must be compatible with all operational and non-operational functions of the C21.

3.2.3.2 When used with the C21, the Sniper Cartridge must:

a. Not cause weapon stoppages beyond that allowable by table 2;

b. Not cause damage to the test weapon;

c. Not be damage while operating in the C21 as a result of its mechanical

interface;

d. Not operate in an unsafe manner; and

e. Be mechanically fit and form for use in the C21 (example, loadable in the magazine).

3.3 Test 2 C21 Function Casualty

3.3.1 Aim

3.3.1.1 To confirm that the Sniper Cartridge will operate safely and reliably in the C21 IAW Annex A-2, paragraph 5.4.1.

3.3.2 Procedure

a. 2 x C21 weapons (Test Weapon 1 and Test Weapon 2) will be inspected, gauged and fired using 5 rounds of CAF in-service .338 Lapua Magnum B408 to confirm serviceability;

b. A sample of 500 Sniper Cartridges will be fired from the 2 Test Weapons IAW the firing regime and temperatures detailed in table 1;

c. All ammunition used during the test will be conditioned to the required temperature for no less than 24 hours prior to the test;

d. Ammunition will be preloaded into magazines and removed from the conditioning chamber as it is being fired to avoid conditioning the ammunition to the laboratory ambient conditions;

e. Prior to being loaded into magazines, every Sniper Cartridge must be visually inspected for defects. If a visual defect is found, the defective cartridge will be replaced and the defect photographed and reported;

f. A witness screen will be placed at 5m from the muzzle to witness bullet impacts. Witness screens will be inspected and replaced IAW Table 1;

g. For every cartridge fired:

i. All problems associated with feeding, firing, and extraction will be noted;

ii. The witness screen and fired casings will be inspected and carefully examined for defects IAW MCMOPI, AC/225(DSS)D(2013)0014(PFP), Section 11.

h. If it cannot be established that the weapon and equipment is at fault, then the defects must be judged and noted against the ammunition;

i. Based on the sentencing criteria in section 3.3.3, a second sample of 500 Sniper Cartridges may be fired using the same procedure as above;

j. The test weapons will be periodically inspected and maintained IAW provided operator and maintenance manuals.

Table 1 Firing Regime for Sniper Cartridge Function and Casualty test with C21			
Test Weapon	**Firing Series**	**Temp**	**Qty**
Test Weapon 1	1	+21°C	20
Test Weapon 1	2	+21°C	20
Test Weapon 1	3	+21°C	20
Test Weapon 1	4	+21°C	20
Test Weapon 1	5	+21°C	20
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Test Weapon 2	6	+21°C	20
Test Weapon 2	7	+21°C	20
Test Weapon 2	8	+21°C	20
Test Weapon 2	9	+21°C	20
Test Weapon 2	10	+21°C	20
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Test Weapon 1	11	+49°C	20
Test Weapon 1	12	+49°C	20
Test Weapon 1	13	+49°C	20
Test Weapon 1	14	+49°C	15
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Test Weapon 2	15	+49°C	20
Test Weapon 2	16	+49°C	20
Test Weapon 2	17	+49°C	20
Test Weapon 2	18	+49°C	15
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Test Weapon 1	19	-46°C	20
Test Weapon 1	20	-46°C	20
Test Weapon 1	21	-46°C	20
Test Weapon 1	22	-46°C	15
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Test Weapon 2	23	-46°C	20
Test Weapon 2	24	-46°C	20
Test Weapon 2	25	-46°C	20
Test Weapon 2	26	-46°C	15
Inspect/Change Witness Screens and Inspect Fired Cases, Cool Weapon			
Total Cartridges			500

3.3.3 Sentencing Criteria

3.3.3.1 The total number of accumulated Function and Casualty defects, as defined by MCMOPI AC/225(DSS)D(2013)0014(PFP), Section 11, must not exceed those indicated in Table 2 when fired from the C21 test weapons.

Table 2
Sentencing Table for Sniper Cartridge Function and Casualty test with C20

Definitions of the Defect Categories are listed in Section 11 of the MCMOPI	Sample	Sample Size	Cumulative Sample Size	Accept	Reject
Category 1 Defects (Critical)	1st 2nd	500 Not Permitted	500 Not Permitted	0 -	1 -
Category 2 Defects	1st 2nd	500 500	500 500	0 3	3 4
Category 3 Defects	1st 2nd	500 500	500 500	2 6	5 7
Category 4 Defects	1st 2nd	500 500	500 500	7 18	11 19

3.3.3.2 A re-test with an equivalent quantity of cartridges (quantity 500) is to be conducted with the same weapons if the “Accept” figure in the first sample is exceeded but the “Reject” figure has not been reached.

3.3.3.3 If the number of defects permitted by table 2 is exceeded, the test will be sentenced a failure.

3.3.3.4 If one or more critical defects occur (Category 1), the test will be sentenced a failure.

3.4 Test 3 C21 Precision

3.4.1 Aim

3.4.1.1 The Sniper Cartridge precision will be assessed when fired from the C21.

3.4.2 Procedure

Conduct a precision shoot using the following procedure:

a. 2 x C21 weapons (Test Weapon 1 and Test Weapon 2) must be inspected, gauged and confirmed serviceable;

b. Weapons are to be zeroed and fired from a hand held prone position using 5-25x scopes.

c. A sample of 50 Sniper Cartridges must be removed from their packaging, visually inspected and the Overall Cartridge Lengths (OACL) measured and recorded;

d. The test ammunition must be stored at +21 ± 3°C, for not less than 6 hours and must be fired at that temperature;

e. Each rifle must fire at 5 targets located at 300m (10 targets total);

f. 1 group of 5 rounds must be fired into each separate target (5 groups of 5 for each rifle); and

g. The Extreme Spread of each target must be calculated independently and then averaged with the other targets to obtain the mean Extreme Spread.

3.4.3 Sentencing Criteria

3.4.3.1 There is no sentencing criteria for the Sniper Cartridge when fired from C21.

APPENDIX 2 to ANNEX A-2

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

S3 SEQUENTIAL TEST REQUIREMENTS

Reference Number: W8476-206308

Date: 17 Nov 2020

Prepared by:

DSSPM 9
Technical Authority/Life Cycle Materiel Manager
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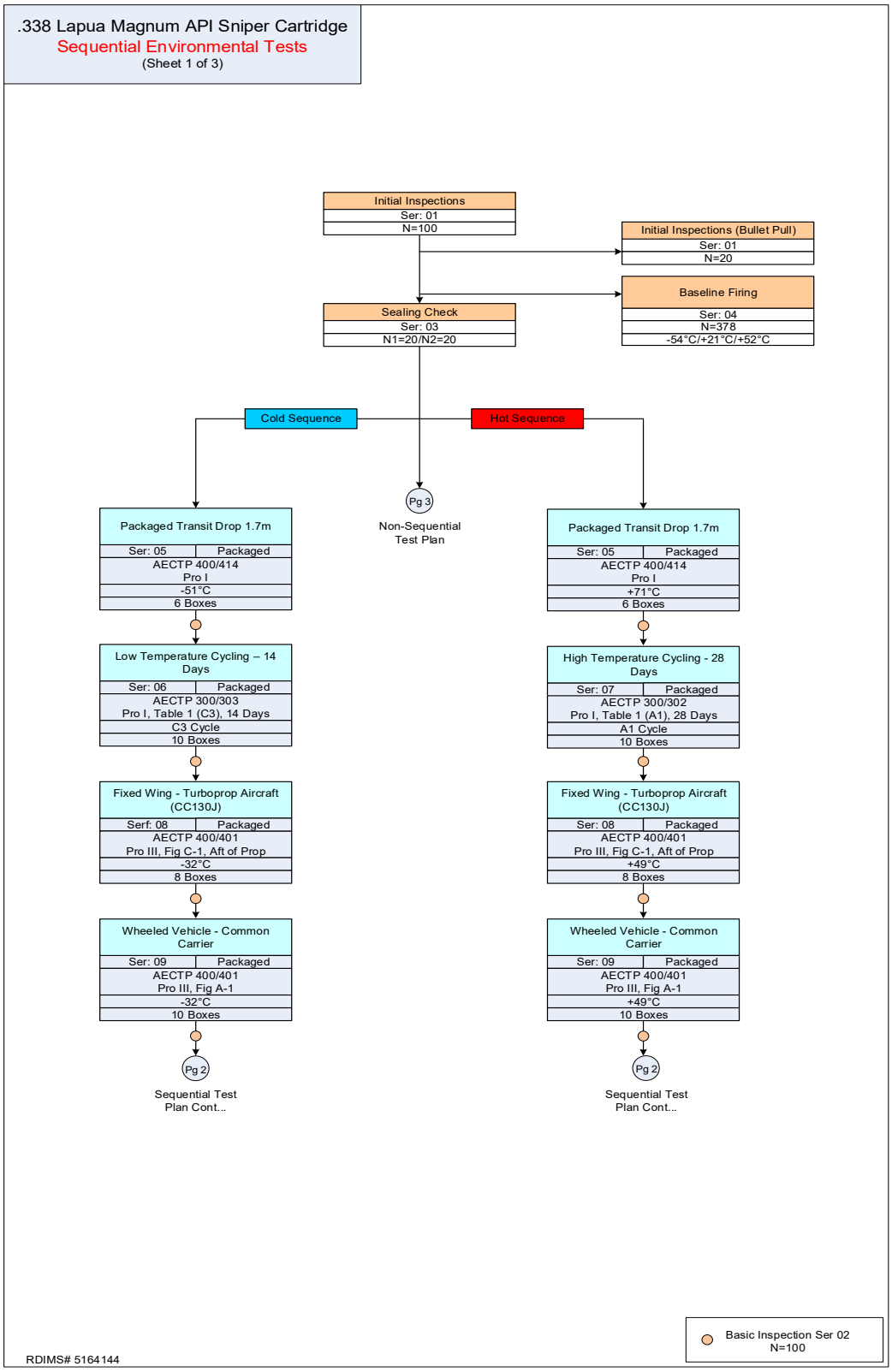
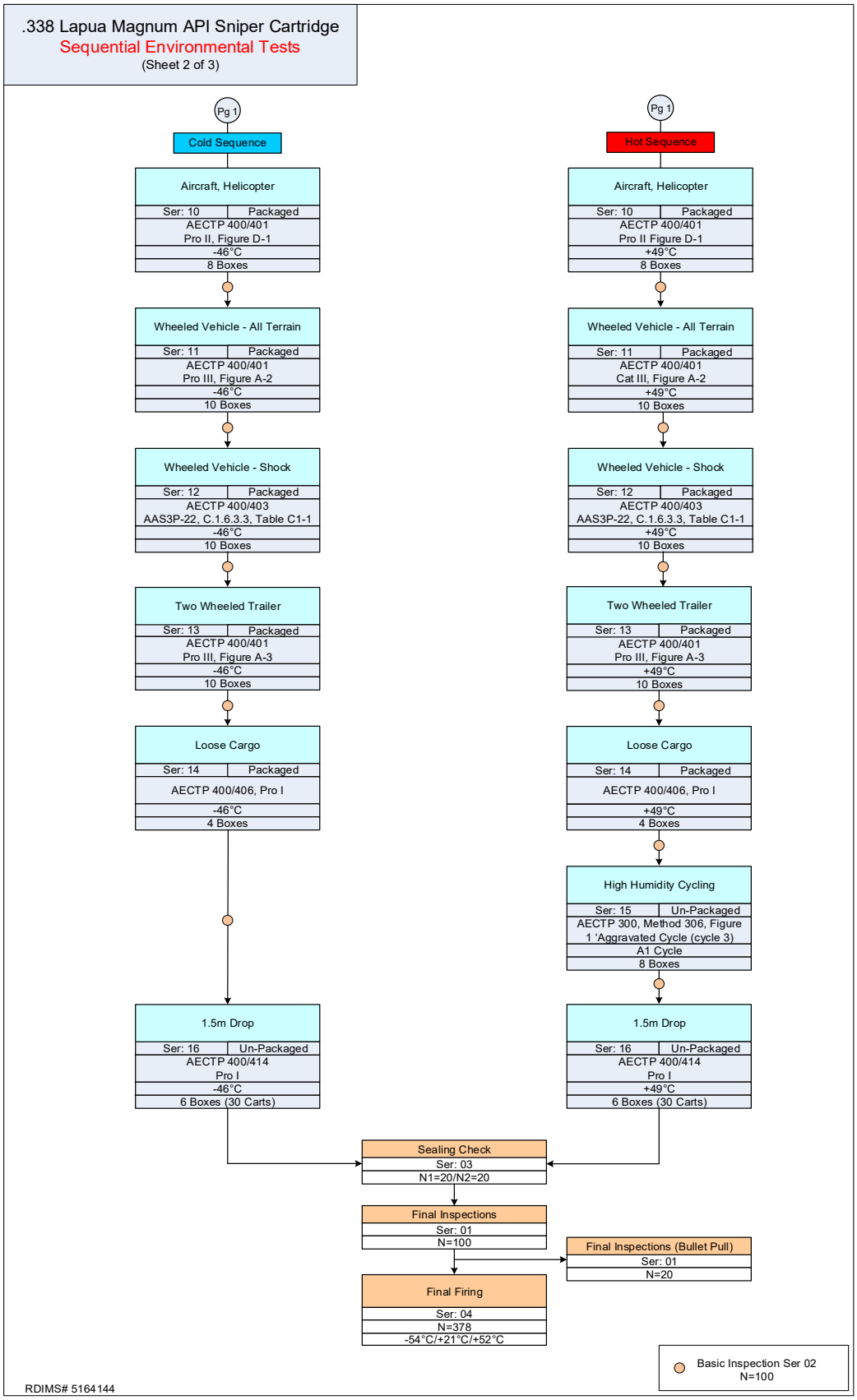

.338 Lapua Magnum API Sniper Cartridge
Sequential Environmental Tests
(Sheet 1 of 3)
Initial Inspections
Ser: 01
N=100
Initial Inspections (Bullet Pull)
Ser: 01
N=20
Baseline Firing
Ser: 04
N=378
-54°C/+21°C/+52°C
Sealing Check
Ser: 03
N1=20/N2=20
Cold Sequence
Hot Sequence
Pg 3
Non-Sequential Test Plan
Packaged Transit Drop 1.7m
Ser: 05
Packaged
AECTP 400/414
Pro I
-51°C
6 Boxes
Packaged Transit Drop 1.7m
Ser: 05
Packaged
AECTP 400/414
Pro I
+71°C
6 Boxes
Low Temperature Cycling – 14 Days
Ser: 06
Packaged
AECTP 300/303
Pro I, Table 1 (C3), 14 Days
C3 Cycle
10 Boxes
High Temperature Cycling - 28 Days
Ser: 07
Packaged
AECTP 300/302
Pro I, Table 1 (A1), 28 Days
A1 Cycle
10 Boxes
Fixed Wing - Turboprop Aircraft (CC130J)
Serf: 08
Packaged
AECTP 400/401
Pro III, Fig C-1, Aft of Prop
-32°C
8 Boxes
Fixed Wing - Turboprop Aircraft (CC130J)
Ser: 08
Packaged
AECTP 400/401
Pro III, Fig C-1, Aft of Prop
+49°C
8 Boxes
Wheeled Vehicle - Common Carrier
Ser: 09
Packaged
AECTP 400/401
Pro III, Fig A-1
-32°C
10 Boxes
Wheeled Vehicle - Common Carrier
Ser: 09
Packaged
AECTP 400/401
Pro III, Fig A-1
+49°C
10 Boxes
Pg 2
Sequential Test Plan Cont...
Pg 2
Sequential Test Plan Cont...
Basic Inspection Ser 02
N=100
RDIMS# 5164144


.338 Lapua Magnum API Sniper Cartridge
Sequential Environmental Tests
(Sheet 2 of 3)
Pg 1
Cold Sequence
Aircraft, Helicopter
Ser: 10 Packaged
AECTP 400/401
Pro II, Figure D-1
-46°C
8 Boxes
Wheeled Vehicle - All Terrain
Ser: 11 Packaged
AECTP 400/401
Pro III, Figure A-2
-46°C
10 Boxes
Wheeled Vehicle - Shock
Ser: 12 Packaged
AECTP 400/403
AAS3P-22, C.1.6.3.3, Table C1-1
-46°C
10 Boxes
Two Wheeled Trailer
Ser: 13 Packaged
AECTP 400/401
Pro III, Figure A-3
-46°C
10 Boxes
Loose Cargo
Ser: 14 Packaged
AECTP 400/406, Pro I
-46°C
4 Boxes
1.5m Drop
Ser: 16 Un-Packaged
AECTP 400/414
Pro I
-46°C
6 Boxes (30 Carts)
Pg 1
Hot Sequence
Aircraft, Helicopter
Ser: 10 Packaged
AECTP 400/401
Pro II Figure D-1
+49°C
8 Boxes
Wheeled Vehicle - All Terrain
Ser: 11 Packaged
AECTP 400/401
Cat III, Figure A-2
+49°C
10 Boxes
Wheeled Vehicle - Shock
Ser: 12 Packaged
AECTP 400/403
AAS3P-22, C.1.6.3.3, Table C1-1
+49°C
10 Boxes
Two Wheeled Trailer
Ser: 13 Packaged
AECTP 400/401
Pro III, Figure A-3
+49°C
10 Boxes
Loose Cargo
Ser: 14 Packaged
AECTP 400/406, Pro I
+49°C
4 Boxes
High Humidity Cycling
Ser: 15 Un-Packaged
AECTP 300, Method 306, Figure
1 'Aggravated Cycle (cycle 3)
A1 Cycle
8 Boxes
1.5m Drop
Ser: 16 Un-Packaged
AECTP 400/414
Pro I
+49°C
6 Boxes (30 Carts)
Sealing Check
Ser: 03
N1=20/N2=20
Final Inspections
Ser: 01
N=100
Final Inspections (Bullet Pull)
Ser: 01
N=20
Final Firing
Ser: 04
N=378
-54°C/+21°C/+52°C
Basic Inspection Ser 02
N=100
RDIMS# 5164144

Sequential Test Plan						
Ser	**Test Title**	**Temp**	**Cartridge Configuration**	**Standard/Method**	**Sentencing Criteria**	**Total Cartridges**
01	Initial/Final Inspections	Lab Ambient	Packaged/Unpackaged	To establish the exact dimensions of the ammunition - also its appearance both to ensure it is in good order at the start of testing and to act as a baseline for comparison of any change occurring after particular tests. All boxes visually inspected. Sample of 100 Sniper Cartridges to be inspected IAW AC/255 (LG/3 – SG/1) /D14, Section 3.3, Initial Inspection of Point Target Ammunition Paragraphs 3.3.1.3 sub paras (a) and (b) and AAS3P-22, Section 7.1. a. Defects noted on visual inspection of sample 100 cartridges; b. Gauging and measuring the run-out of 50 cartridges from the original sample of 100 cartridges; c. Assess ability of round to be safely chambered and extracted; d. Bullet Extraction Test. (20 Cartridges). Conducted IAW Multi-Caliber MOPI PFP(NAAG-LCG/1-SG/1)WP(2010)0002, Section 25, Bullet Extraction Test Procedure; and e. Weighing of 20 cartridges sub-assemblies including propellant.	The ammunition must be in good working order and safe to use. Dimensions must be in accordance with OEM technical specification and/or TDP.	Inspection 100 inspection 20 Bullet Extractions **Total: 120**
02	Basic Inspection	Lab Ambient	Packaged/Unpackaged	The ammunition and packaging is inspected visually: a. Overall condition of ammunition and packaging, noting damage/degradation (e.g. abrasion, indentations, splits,	The Cartridge must show no signs of damage that would interfere with its safe and/or proper operation with the test weapon. The cartridges must be capable of being loaded into the weapon and the	Basic Inspection **Total: 100**

Sequential Test Plan						
Ser	**Test Title**	**Temp**	**Cartridge Configuration**	**Standard/Method**	**Sentencing Criteria**	**Total Cartridges**
				scratches, corrosion, etc.); b. Durability of identification and information markings; c. Inspect interior of packaging for foreign material, loose propellant, evidence of moisture and general cleanliness; d. Primer condition (e.g. 'cocked', loose, etc.); and e. Looseness of projectile in cartridge case.	breech locked fully closed. The cartridge case and body must meet its specification and be in serviceable condition. Packaging must be in serviceable condition.	
03	Sealing Check	Lab Ambient	Unpackaged	Multi-Caliber MOPI PFP(NAAG-LCG/1-SG/1)WP(2010)0002, Section 27, Waterproof Test Procedure.	Multi-Caliber MOPI PFP(NAAG-LCG/1-SG/1)WP(2010)0002, Section 27, Waterproof Test Procedure.	Sealing Check Sample 1: 20 Sample 2: 20 **Total: 40**
04	Baseline/Final Firing (Function and Reliability)	EPVAT -54°C/+21°C/ +52°C/+71°C Weapon System -54°C/+21°C/+52°C	Unpackaged and fired from test weapon	PFP(NAAG-LG/3-SG/1)D(2004)1 Multi Calibre Manual of Proof and Inspection (MCMOPI). This test is being conducted to establish safety and the baseline characteristics of the cartridge under test. These reference characteristics will be used to assess the effects of environmental stressing on the pressure, muzzle velocity, precision and function casualty. Verification testing will take place where indicated in the sequential test program. The following will be conducted: Pressure, Velocity and Action Time IAW MC MOPI, Test 12 (3 warmers + 30 test cartridges at each Temp): Combination Electronic Pressure Velocity & Action Time (EPVAT). Precision and Bullet Drop: Fire Sniper Cartridges (hand Held) from the test weapons at a test target placed 100m down range.	Pressure, Velocity and Action Time The cartridge shall meet the OEM technical specification sentencing criteria for pressure, velocity and action time for -54°C, +21°C and +52°C. The cartridge shall remain safe for use at +71°C. Precision and Bullet Drop The precision (extreme spread) and mean point of impact will be characterized for two precision test barrels or weapons. Function The cartridges shall be safe and serviceable when fired from the weapon system at ambient and extreme temperatures. The casings shall show no sign of Category 1 or 2 defects or	Pressure, Velocity and Action Time +21°C: 30 Ref -54°C: 3+30 +21°C: 3+30 +52°C: 3+30 +71°C::3+30 *Sub Total: 162* Precision and Bullet Drop Zero (3 x 2 wpns): 6 Grouping (3 x 5 groups x 2 wpns): 30 *Sub Total: 36* Function & Reliability Per Weapon: -54°C: 30 +21°C: 30 +52°C: 30 90 x 2 Weapons:

Sequential Test Plan						
Ser	**Test Title**	**Temp**	**Cartridge Configuration**	**Standard/Method**	**Sentencing Criteria**	**Total Cartridges**
				Fix the point of aim for each shot using 5-25x scope. • Zero Weapons: 5 round group; • Shoot 5 groups of 5 rounds to confirm precision and mean point of impact (bullet drop). Function and Reliability: Ambient and extreme temperature firing with weapon system (2 weapons). All stoppages and malfunctions shall be recorded. The condition of the casing following firing shall be inspected for evidence of splitting, ruptures, separations, flattened or perforated primers, etc (See MCMOPI, Section 11, Annex A, CLASSIFICATION OF DEFECTS AND INCIDENTS).	incident prior to and following live fire.	180 **Total: 378 Cartridges**
05	1.7m Drop	-51°C/+71°C	Packaged	AAS3P-22, Section C.1.3.1 at 1.7m (2 drops per box IAW indicated orientations) AECTP 400/414, Procedure I	The Sniper Cartridge must remain safe and serviceable.	Cold: 6 Boxes Hot: 6 Boxes **Total: 12 Boxes**
06	Low Temperature Cycling – 14 Days	C3 Cycle Induced	Packaged	AAS3P-22, Section C.1.8.1 AECTP 300/303, Procedure I, Table 1 (C3-Severe Cold), Duration 14 Days	The Sniper Cartridge must remain safe and serviceable.	**Total: 10 Boxes**
07	High Temperature Cycling – 28 Days	A1 Cycle Induced	Packaged	AAS3P-22, Section C.1.8.3 AECTP 300/302 Procedure I, Table 1 (A1-Extreme Hot Dry), Duration 28 Days	The Sniper Cartridge must remain safe and serviceable.	**Total: 10 Boxes**
08	Fixed Wing – Turboprop Aircraft (CC130)	-32°C/+49°C	Packaged	AAS3P-22, Section C.1.6.1.2. (1 hour per axis) AECTP 400/401 Procedures III, Figure C-1 (Aft of Prop) Secure Cargo F_0 = 68 Hz F_1 = 136 Hz F_2 = 204 Hz F_3 = 272 Hz L_0 = 0.30 g^2/Hz (assuming storage in the fuselage aft of the propeller).	The Sniper Cartridge must remain safe and serviceable.	Cold: 8 Boxes Hot: 8 Boxes **Total: 16 Boxes**

Sequential Test Plan						
Ser	**Test Title**	**Temp**	**Cartridge Configuration**	**Standard/Method**	**Sentencing Criteria**	**Total Cartridges**
09	Wheeled Vehicle – Common Carrier	-32°C/+49°C	Packaged	AAS3P-22, Section C.1.6.3.1 (1600km) AECTP 400/401 Procedure III, Figure A-1 Secure Cargo	The Sniper Cartridge must remain safe and serviceable.	Cold: 10 Boxes Hot: 10 Boxes **Total: 20 Boxes**
10	Aircraft, Helicopter	-46°C/+49°C	Packaged	AAS3P-22, Section C.1.6.1.3. (10 Hours Total) AECTP 400/401 Procedure II Figure D-1 Secure Cargo F_1 = 11 Hz F_2 = 17 Hz F_3 = 22 Hz	The Sniper Cartridge must remain safe and serviceable.	Cold: 8 Boxes Hot: 8 Boxes **Total: 16 Boxes**
11	Wheeled Vehicle – All Terrain	-46°C/+49°C	Packaged	AAS3P-22, Section C.1.6.3.2. AECTP 400/401 Procedure III, Figure A-2 Secure Cargo 40 min / axis (805 km)	The Sniper Cartridge must remain safe and serviceable.	Cold: 10 Boxes Hot: 10 Boxes **Total: 20 Boxes**
12	Wheeled Vehicle - Shock	-46°C/+49°C	Packaged	AAS3P-22, Section C.1.6.3.3. Conducted IAW AECTP 400/403 using AAS3P-22 half sinewave shock levels (AAS3P-22, Section C.1.6.3.3, Table C1-1).	The Sniper Cartridge must remain safe and serviceable.	Cold: 10 Boxes Hot: 10 Boxes **Total: 20 Boxes**
13	Two-Wheeled Trailer	-46°C/+49°C	Packaged	AAS3P-22, Section C.1.6.3.4. AECTP 400/401 Procedure III, Figure A-3 Secure Cargo 32 minutes / axis (52 km).	The Sniper Cartridge must remain safe and serviceable.	Cold: 10 Boxes Hot: 10 Boxes **Total: 20 Boxes**
14	Loose Cargo	-46°C/+49°C	Packaged	AAS3P-22, Section C.1.7.1. (20 minutes) AECTP 400/406 Procedure I Test bed designed to accommodate M2A1 ammunition container on its side and bottom.	The Sniper Cartridge must remain safe and serviceable.	Cold: 4 Boxes Hot: 4 Boxes **Total: 8 Boxes**
15	High Humidity Cycling	+30°C to +60°C	Unpackaged	AAS3P-22, Section C.1.8.2 AECTP 300, Method 306, Figure 1 Aggravated Cycle (cycle 3) 10 x 24 hour durations	The Sniper Cartridge must remain safe and serviceable.	**Total: 8 boxes**

Sequential Test Plan						
Ser	**Test Title**	**Temp**	**Cartridge Configuration**	**Standard/Method**	**Sentencing Criteria**	**Total Cartridges**
16	1.5m Drop	-46°C/+49°C	Unpackaged	AAS3P-22, Section C.1.7.2 (5 cartridges dropped each in one of the identified orientations – total of 5 drops per identified box). AECTP 400/414 Procedure I	The cartridges shall remain safe to fire.	30 from cold stream 30 from hot stream **Total: 60 Cartridges**

APPENDIX 3 to ANNEX A-2

.338 LAPUA MAGNUM ARMOUR PIERCING INCENDIARY SNIPER CARTRIDGE

S3 NON-SEQUENTIAL TEST REQUIREMENTS

Reference Number: W8476-206308

Date: 17 Nov 2020

Prepared by:

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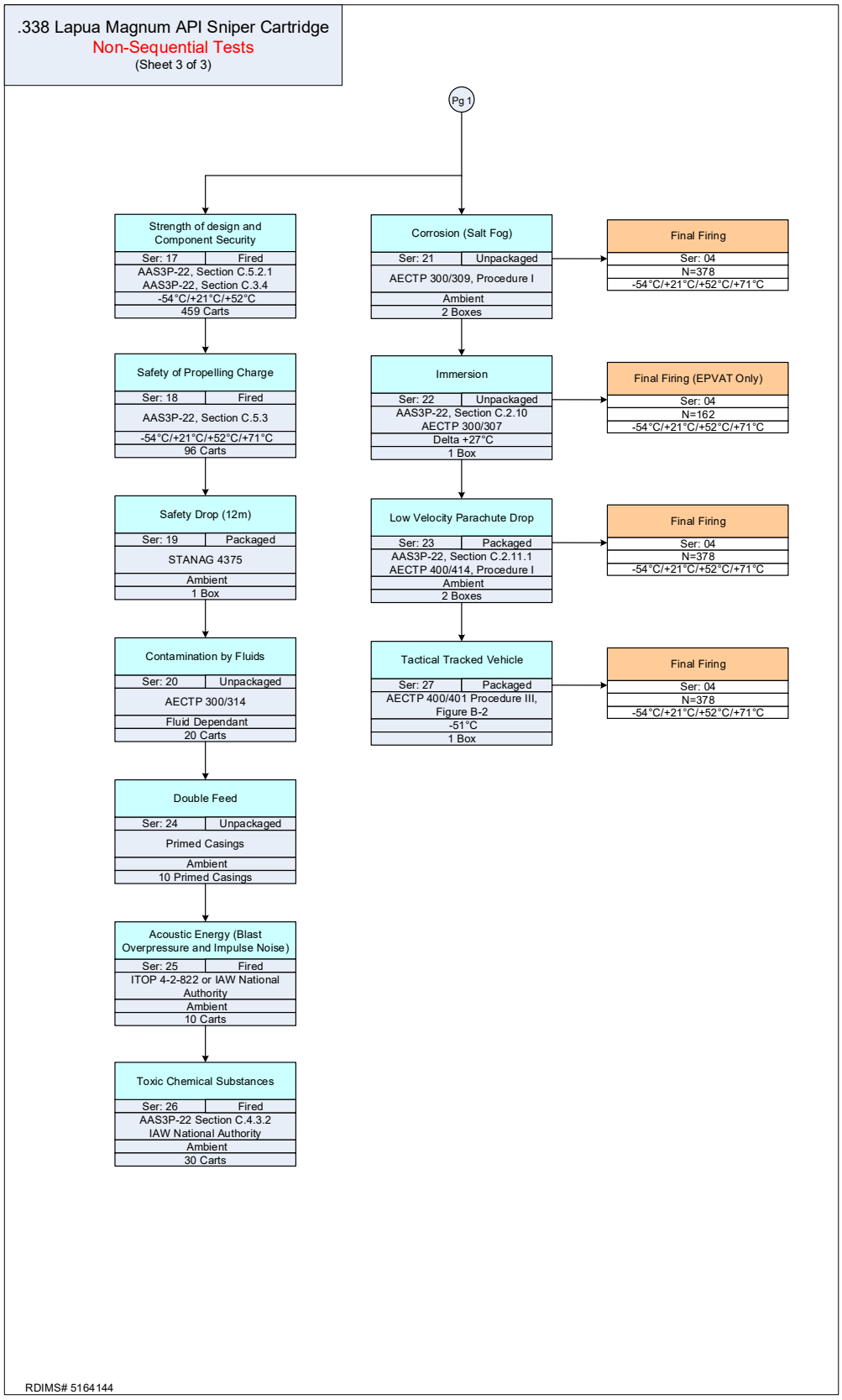
.338 Lapua Magnum API Sniper Cartridge
Non-Sequential Tests
(Sheet 3 of 3)
Pg 1
Strength of design and Component Security
Ser: 17
Fired
AAS3P-22, Section C.5.2.1
AAS3P-22, Section C.3.4
-54°C/+21°C/+52°C
459 Carts
Safety of Propelling Charge
Ser: 18
Fired
AAS3P-22, Section C.5.3
-54°C/+21°C/+52°C/+71°C
96 Carts
Safety Drop (12m)
Ser: 19
Packaged
STANAG 4375
Ambient
1 Box
Contamination by Fluids
Ser: 20
Unpackaged
AECTP 300/314
Fluid Dependant
20 Carts
Double Feed
Ser: 24
Unpackaged
Primed Casings
Ambient
10 Primed Casings
Acoustic Energy (Blast Overpressure and Impulse Noise)
Ser: 25
Fired
ITOP 4-2-822 or IAW National Authority
Ambient
10 Carts
Toxic Chemical Substances
Ser: 26
Fired
AAS3P-22 Section C.4.3.2
IAW National Authority
Ambient
30 Carts
Corrosion (Salt Fog)
Ser: 21
Unpackaged
AECTP 300/309, Procedure I
Ambient
2 Boxes
Final Firing
Ser: 04
N=378
-54°C/+21°C/+52°C/+71°C
Immersion
Ser: 22
Unpackaged
AAS3P-22, Section C.2.10
AECTP 300/307
Delta +27°C
1 Box
Final Firing (EPVAT Only)
Ser: 04
N=162
-54°C/+21°C/+52°C/+71°C
Low Velocity Parachute Drop
Ser: 23
Packaged
AAS3P-22, Section C.2.11.1
AECTP 400/414, Procedure I
Ambient
2 Boxes
Final Firing
Ser: 04
N=378
-54°C/+21°C/+52°C/+71°C
Tactical Tracked Vehicle
Ser: 27
Packaged
AECTP 400/401 Procedure III, Figure B-2
-51°C
1 Box
Final Firing
Ser: 04
N=378
-54°C/+21°C/+52°C/+71°C
RDIMS# 5164144

Non-Sequential Test Plan

Ser	Test Title	Temperature	Cartridge Configuration	Standard/Method	Sentencing Criteria	Total Cartridges
17	Strength of design and Component Security Strength-of-design tests are conducted to verify that projectile and cartridge case structural components can withstand the maximum firing stresses at the extreme firing temperatures.	-54°C/+21°C/+52°C	Unpackaged and Fired from test weapon.	AAS3P-22, Section C.5.2.1 Strength of Design Test. AAS3P-22, Section C.3.4 Component Security. Fire a minimum of 459 rounds, divided in three equal groups, at -54°C, +21 °C and +52°C. Fired from pressure barrel. Vertical witness screens must be used to detect parts or fragments that may separate from the projectile while it is in bore or in the early part of its flight.	There shall be no break-up of the projectile or other debris, as evidenced by witness panels that constitutes a hazard to the user or other personnel in close proximity. Visual examination of the cartridge cases after extraction shall not show any evidence of deformation, cracks, body engraving, failure to obturate, hard extraction or other evidence of failure.	**Total:** **459 Cartridges**
18	Safety of Propelling Charge To demonstrate that the propelling charge is safe and suitable for service with the weapon system. To verify that the system Maximum Operating Pressure (MOP) is lower than the weapon Permissible Maximum Pressure (PMP) and that the System Extreme MOP is lower than the weapon Design Pressure (DP).	-54°C/+21°C/ +52°C/+71°C	Unpackaged and Fired from test weapon.	AAS3P-22, Section C.5.3 Part 1: Preliminary Internal Ballistics Assessment: EPVAT testing IAW MCMOPI, Test 12: Combination Electronic Pressure Velocity & Action Time (EPVAT). -54°C: 10 Rounds +21°C: 10 Rounds +52°C: 10 Rounds +71°C: 10 Rounds Pressure barrels must meet AAS3P-22 criteria for wear. Part 2: Maximum Operating Pressure (MOP) Assessment: Cartridges to be fired IAW AAS3P-22 – One Lot Test Propelling System Safety Test (See table C5-2 for sampling and firing regime) at +52°C (Extreme Service Condition).	The system MOP must not exceed the weapon Permissible Maximum Pressure. The system Extreme MOP must not exceed the weapon DP.	Part 1: -54°C: 10 +21°C: 10 +52°C: 10 +71°C: 10 *Sub-total: 40* Part 2: 7 carts x 2 barrels x 4 Occasions = 56 *Sub Total : 56* **Total:** **96 Cartridges**

Non-Sequential Test Plan

Ser	Test Title	Temperature	Cartridge Configuration	Standard/Method	Sentencing Criteria	Total Cartridges
	See STANAG 4110 for pressure definitions. Weapon PMP and DP to be provided by OEM.			Data collection requirements as per AAS3P-22 section C.5.3.		
19	Safety drop (12m) To determine if the cartridges will remain safe for disposal following a drop height of 12m, typical of loading/unloading as shipborne cargo.	Ambient	Packaged in M2A1 Ammunition Container	STANAG 4375 • Packaged – 1 box • 12m drop from tower/crane	The cartridges shall be safe to dispose of following exposure to 12m drop.	**Total:** **1 Box**
20	Contamination by Fluids To demonstrate that the cartridges will remain serviceable following occasional exposure to fluids typically associated with weapon maintenance and bug repellents containing DEET.	CLP: 150°C Insecticide: Ambient	Unpackaged	AECTP 300/314 • Unpackaged – 10 Cartridges per fluid • CLP (Cleaning, lubricating and protector used on small arms) • Insecticides: Insect repellent containing up to 30% DEET (any) Test procedure to be developed IAW national standards.	Exposure to contaminating fluids shall not have an adverse effect on the component parts of the ammunition. The ammunition shall remain safe and serviceable and function within specification when fired from the test weapon.	CLP: 10 DEET: 10 **Total:** **20 Cartridges**
21	Corrosion (Salt Fog) To determine if the ammunition is capable of surviving exposure to salt water when	Ambient	Unpackaged	AECTP 300/309, Procedure I • Unpackaged – 2 Boxes • 2x48hrs: 24hr fog / 24hr Dry • Following exposure, wipe the cartridges down prior to use. Firing after Non-Sequential Test:	The ammunition shall remain safe and serviceable and function within specification when fired from the test weapon.	**Total:** **2 Boxes**

Non-Sequential Test Plan						
Ser	Test Title	Temperature	Cartridge Configuration	Standard/Method	Sentencing Criteria	Total Cartridges
	in its unpackaged state.			Conduct Basic Inspection (Sequential Test Plan, Serial 02) and Baseline Firing (Sequential Test Plan, Serial 04).		
22	Immersion To determine if the ammunition is capable of surviving water immersion when in its unpackaged state following solar loading conditions.	27 °C above the water temperature	Unpackaged	AAS3P-22, Section C.2.10. AECTP 300/307: • Unpackaged – 1 Box • Conditioning Temperature: Cartridges are to be preconditioned to a temperature of 27 °C above the water temperature to represent exposure to solar heating. • 1 meter depth • 30 minutes Firing after Non-Sequential Test: Conduct Basic Inspection (Sequential Test Plan, Serial 02) and Baseline Firing (Sequential Test Plan, Serial 04), EPVAT only.		**Total:** **1 Boxes**
23	Low Velocity Parachute Drop To determine if the ammunition is capable of surviving low velocity parachute drops, in its packaged state, when prepared IAW national procedures.	Ambient	Prepared IAW US TM 4-48x16, cartridges base down	AAS3P-22, Section C.2.11.1 Parachute Drop Shock – Low Velocity AECTP 400/414, Procedure I. • Packaged – 2 Boxes (M2A1) • Prepared IAW US TM 4-48.16, cartridges base down • Drop height of 4.3m onto concrete or concrete backed steel Firing after Non-Sequential Test: Conduct Basic Inspection (Sequential Test Plan, Serial 02) and	The ammunition shall remain safe and serviceable and function within specification when fired from the test weapon.	**Total:** **2 Boxes**

Non-Sequential Test Plan

Ser	Test Title	Temperature	Cartridge Configuration	Standard/Method	Sentencing Criteria	Total Cartridges
				Baseline Firing (Sequential Test Plan, Serial 04).		
24	Double Feed To identify the potential safety hazard when one cartridge is fed to impact the base of a live cartridge, or a fired case, already in the chamber.	Ambient	Unpackaged	Confirm that double feed is possible. Procedure: • Load primed casing into test weapon. • Attempt to feed live ammunition from an inserted magazine. • If the primed casing does not initiate, fire primed casing to ensure serviceability. • Conduct 10 double feed trials.	If a double feed is possible, it shall not cause the chambered cartridge to be initiated.	**Total:** **10 Primed Cartridges**
25	Acoustic Energy (Blast Overpressure and Impulse Noise) To determine and characterize the noise pressure experienced at the locations of the gunner and, where applicable, the weapon crew and non-weapon crew personnel. This information will be used to determine the amount of hearing protection required and to establish maximum exposure in a 24 hour period given no, single and double hearing protection.	Ambient	Unpackaged and fired from test weapon	AAS3P-22 Section C.4.3.1 specifies ITOP 4-2-822, however test procedure to be developed IAW national standards and in consultation with Defence Force Health Protection (DFHP) personnel in DLEPS. Sound measurements to be taken using pressure transducers located at the required positions: • Gunner Head Position (5 rounds); and • Spotter Head Position (5 Rounds)	Characterization test only to determine the amount of hearing protection required and to establish maximum exposure in a 24 hour period given no, single and double hearing protection.	Gunner: 5 Spotter: 5 **Total:** **10 cartridges**

Non-Sequential Test Plan

Ser	Test Title	Temperature	Cartridge Configuration	Standard/Method	Sentencing Criteria	Total Cartridges
26	Toxic Chemical Substances To determine the amount of toxic fumes that the gunner, and where applicable, weapon crew and non-weapon crew will be exposed to per round when firing the weapon in the open and within enclosed spaces.	Ambient	Unpackaged and fired from test weapon	AAS3P-22 Section C.4.3.2. Test procedure to be developed IAW national standards and in consultation with DFHP. OEM will provide the required list of combustion products and their concentrations. Air samples to be taken during live firing in the open air and in simulated enclosed spaces.	Characterization test only to determine the amount of toxins in the air. This will be used to establish a maximum number of rounds a user should be exposed to within a 24 hour period based on occupational health and safety regulations.	**Total:** **30 cartridges**
27	Tactical Tracked Vehicle To confirm that the cartridges are capable of surviving Sovereignty Operations in high Arctic when being transported in tracked vehicles across tundra.	-46°C	Packaged	AECTP 400/401 Procedure III, Figure B-2. Firing after Non-Sequential Test: Conduct Basic Inspection (Sequential Test Plan, Serial 02) and Baseline Firing (Sequential Test Plan, Serial 04).	Environmental stressing shall not have an adverse effect on the component parts of the ammunition as determined by a visual and Critical Examination.	**Total:** **1 Box**