

Appendix 2 to Annex D

C21 MULTI-CALIBRE SNIPER WEAPON SYSTEM

COMPLIANCE VERIFICATION CHECKLIST FOR PHASES 2 AND 3



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PHASE 2 PART I - PHYSICAL EXAMINATION			
Item	Requirement	Method of Verification	Compliant (Y/N)
3.1.2.5	The Rifle stock cheek rest and recoil pad must allow both right handed and left handed users to maintain the proper sight picture.	<p>The Evaluator will mount the scope provided with the PPS onto the PPS Rifle 12 O`Clock rail, position the PPS in a shooting position, and attempt to look through the scope in both Left and Right hand shooting positions.</p> <p>Assess as "Compliant" if the Rifle stock cheek rest and recoil pad allow the Evaluator to maintain the proper sight picture in both left and right hand shooting positions.</p>	
3.1.3.4	The 3, 6 and 9 O'clock NATO accessory rails must be able to be mounted at various positions along the length of the Rifle forestock.	<p>The Evaluator will examine the PPS to determine if the 3, 6 and 9 O`Clock NATO accessory rails can be mounted at various positions along the length of the Rifle forestock.</p> <p>Assess as "Compliant" if the 3, 6 and 9 O`Clock NATO accessory rails can be mounted at various positions along the length of the Rifle forestock.</p>	
3.1.3.5	The 3, 6 and 9 O'clock NATO accessory rails must be interchangeable between each other.	<p>The Evaluator will examine the PPS and attempt to mount the 3 O'clock NATO rail at the 6 and 9 O`Clock positions, the 6 O'clock NATO rail at the 3 and 9 O`Clock positions, and the 9 O'clock NATO rail at the 3 and 6 O`Clock positions.</p> <p>Assess as "Compliant" if the 3, 6 and 9 O`Clock NATO accessory rails are found to be interchangeable between each other.</p>	

Item	Requirement	Method of Verification	Compliant (Y/N)
3.1.4.2	The trigger must automatically return to its normal forward position upon release after partial or complete trigger pull.	<p>The Evaluator will examine both PPS configurations.</p> <p>The Evaluator will set the Safety in the "FIRE" position, engage the bolt, and attempt to pull the trigger, both fully and partially, and observe if the trigger automatically returns to its normal forward position upon release.</p> <p>Assess as "Compliant" if the trigger automatically returns to its normal forward position upon release after partial or complete trigger pull.</p>	
3.1.5.1	The Rifle design must prevent the bolt from being disengaged from the cocked position while the safety is in the "SAFE" position, in both configurations.	<p>The Evaluator will examine both PPS configurations. The Evaluator will cock the bolt on the PPS Rifle and set the safety in the "SAFE" position. The Evaluator will then attempt to disengage the bolt from the cocked position.</p> <p>Assess as "Compliant" if the bolt cannot be disengaged while the safety is in the "SAFE" position, for both configurations.</p>	
3.1.5.3	The state of the Rifle Safety mechanism must be verifiable by both sight and touch.	<p>The Evaluator will toggle the PPS Rifle Safety between "SAFE" and "FIRE" modes. The Evaluator will attempt to confirm the Safety mode by sight. The Evaluator will attempt to confirm the Safety mode by touch.</p> <p>Assess as "Compliant" if the PPS Rifle's Safety modes can be verified by both sight and touch.</p>	

Item	Requirement	Method of Verification	Compliant (Y/N)
3.3.1.3	The Magazines must self-align, be inserted with one hand and lock firmly on the Rifle.	The Evaluator will attempt to insert each of the PPS magazines, .338LM and NATO 7.62 x 51mm, into the Rifle, with one hand. Assess as "Compliant" if the magazines can be inserted into their slot with one hand, and the magazines lock firmly on the Rifle once inserted into their slot.	
3.3.3.5	The Suppressor must attach and disconnect from the rifle without the use of tools.	The Evaluator will attempt to attach and disconnect the Suppressor from the PPS Rifle without the use of tools, in both Calibre configurations, to confirm compliance.	
3.5.3.1	Every assembled Rifle must be proof tested IAW AC/225(LG/3-SG/1)D/14, para 2.1.4.2 in each calibre configuration, inspected, and have proof marks on all pressure bearing components.	Evaluator can verify that each PPS has proof marks on all pressure bearing components identified by the Bidder.	

PHASE 2 PART II - LABORATORY AND RANGE TESTING

Item	Requirement	Method of Verification	Compliant (Y/N)
3.1.1.2	The Rifle must be compatible with NATO 7.62 x 51mm ammunition in one configuration, and with .338 Lapua Magnum ammunition in another configuration.	Testing in accordance with Appendix 3, Test 1.	
3.1.1.12	With an empty magazine inserted into the Rifle slot, the Rifle design must allow for a single round to be inserted directly into the Rifle chamber and cocked without having to insert the round into the magazine.	Testing in accordance with Appendix 3, Test 2.	
3.1.4.3	The trigger second stage pull force must be adjustable and include a pull force range of 13.3 N to 15.6 N (3 lb to 3.5 lb).	Testing in accordance with Appendix 3, Test 7.	
3.1.5.2	The Rifle design must prevent a bullet from being fired while the safety is in the "SAFE" position.	Testing in accordance with Appendix 3, Test 3.	
3.1.5.4	When the safety is in the "FIRE" position and the bolt is not fully engaged, the Rifle design must prevent the bolt from disengaging upon a trigger pull.	Testing in accordance with Appendix 3, Test 3.	
3.3.3.1	The MCSW must be provided with one Suppressor that is compatible for both calibre configurations. Canada will accept either a suppressor mounted directly to the barrel or one mounted to the muzzle brake.	Testing in accordance with Appendix 3, Test 5.	

Item	Requirement	Method of Verification	Compliant (Y/N)
3.3.3.2	The Suppressor must attenuate the sound of the Rifle by a minimum of 20 dB when measured 1 m to the left of the muzzle, in both Calibre configurations.	Testing in accordance with Appendix 3, Test 11.	
3.3.3.10	The Suppressor must not become loose when firing a 5 round grouping in both calibre configurations.	Testing in accordance with Appendix 3, Test 5.	
3.3.4.1	The MCSW must be provided with one Muzzle Brake that is compatible for both calibre configurations.	Testing in accordance with Appendix 3, Test 5.	
3.3.4.2	The Muzzle Brake must not become loose when firing a 5 round grouping in both calibre configurations.	Testing in accordance with Appendix 3, Test 5.	
3.5.1.1	The MCSW in the NATO 7.62 x 51mm configuration, with the Suppressor attached, must achieve an Average Mean Radius of 1.2cm or less for 5 groupings of 5 rounds at a range of 100m.	Testing in accordance with Appendix 3, Test 6.	
3.5.1.2	The MCSW in .338 Lapua Magnum configuration, with the Suppressor attached, must achieve an Average Mean Radius of 1.2cm or less for 5 groupings of 5 rounds at a range of 100m.	Testing in accordance with Appendix 3, Test 6.	
3.5.2.1	<p>The Rifle with Magazine inserted must not discharge the round in the chamber when dropped at a height of 1.5m in each calibre configuration, onto a concrete surface covered with 2mm thick layer of rubber surfacing at uncontrolled ambient conditions in the following rifle orientations:</p> <ul style="list-style-type: none"> a. Rifle vertical, with Muzzle facing impact surface; b. Rifle vertical, with Butt stock facing impact surface; c. Rifle angled forward at 45° to impact surface; d. Rifle angled backwards at 45° to impact surface; and e. Rifle in shooting position and parallel to impact surface. <p>Note: Drops to be conducted with the safety mechanism in the SAFE and FIRE positions, and 2nd stage trigger pull set to lowest specified trigger second stage pull force.</p> <p>AECTP 400, Method 414, Procedure I, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	Testing in accordance with Appendix 3, Test 12.	
3.5.6.1	The MCSW in the NATO 7.62 x 51mm configuration must achieve a MPI shift of no more than 29.1mm at a range of 100m between two groupings of five rounds, where the first grouping of 5 rounds is fired with the suppressor attached, and the second grouping is fired after removing and re-attaching the barrel, without removing the suppressor.	Testing in accordance with Appendix 3, Test 6.	

Item	Requirement	Method of Verification	Compliant (Y/N)
3.5.6.2	The MCSW in the .338LM configuration must achieve a MPI shift of no more than 29.1mm at a range of 100m between two groupings of five rounds, where the first grouping of 5 rounds is fired with the suppressor attached, and the second grouping is fired after removing and re-attaching the barrel, without removing the suppressor.	Testing in accordance with Appendix 3, Test 6.	
3.5.6.3	The MCSW in the NATO 7.62 x 51mm configuration must achieve a MPI shift of no more than 29.1mm at a range of 100m between two groupings of five rounds, where the first grouping of 5 rounds is fired with the suppressor attached, and the second grouping is fired after removing and re-attaching the suppressor.	Testing in accordance with Appendix 3, Test 6.	
3.5.6.4	The MCSW in the .338LM configuration must achieve a MPI shift of no more than 29.1mm at a range of 100m between two groupings of five rounds, where the first grouping of 5 rounds is fired with the suppressor attached, and the second grouping is fired after removing and re-attaching the suppressor.	Testing in accordance with Appendix 3, Test 6.	
3.5.7.1	The duration to change from one calibre to another must be less than or equal to 5 min using tools provided with the weapon system.	Testing in accordance with Appendix 3, Test 4.	
3.6.1	All assemblies and sub-assemblies of the MCSW with identical part numbers must be completely interchangeable for the service life of the weapon without affecting fit, form, function, precision and safety, for both calibre configurations.	Testing in accordance with Appendix 3, Test 10 .	
3.7.1	<p>The MCSW in each calibre configuration must operate without physical damage and without degradation of performance in all low temperature environments associated with the C0, C1, C2 (-46°C min) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>Note: Performance requirements to be assessed while firing a full magazine with no more than one weapon related stoppage in each configuration.</p> <p>AECTP 300, Ed 3, Method 303, Procedure II and III, C2 Cold, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	Testing in accordance with Appendix 3, Test 8.	

Item	Requirement	Method of Verification	Compliant (Y/N)
3.7.2	<p>The MCSW in each calibre configuration must operate without physical damage and without degradation of performance in all high temperature environments associated with the A3, A2 and A1 (+49°C max) climatic regions as described in STANAG 4370, AECTP 200, AECTP 230, Leaflet 2311/1 and Leaflet 2311/2.</p> <p>Note: Performance requirements to be assessed while firing a full magazine with no more than one weapon related stoppage in each configuration.</p> <p>AECTP 300, Ed 3, Method 302, High Temperature Operation (constant temperature), Procedure II, or Equivalent Test Method, is a sufficient means to demonstrate compliance to this requirement.</p>	Testing in accordance with Appendix 3, Test 9.	

PHASE 3 - ENDURANCE AND PRECISION TESTING

Item	Requirement	Method of Verification	Compliant (Y/N)
3.5.4.2	The .338 Lapua Magnum barrel service life must be no less than 4,000 rounds while maintaining an Average Mean Radius of 1.2cm or less for 5 groupings of 5 rounds, at a range of 100 m.	Testing in accordance with Appendix 3, Test 13.	
3.5.5.2	The MCSW in the .338LM configuration must be capable of firing 4,000 rounds with no more than five weapon related stoppages.	Testing in accordance with Appendix 3, Test 13.	