CLAIMS

1. A rifle configured for firing a 7.62×39 mm round, comprising:

an upper receiver;

a lower receiver, the upper receiver being removably secured to the lower receiver, wherein the lower receiver removably receives and secures a magazine therein, the magazine holds at least 30 rounds of 7.62×39 mm ammunition; and

a bolt received within a bolt carrier and wherein at least the bolt and the bolt carrier have dimensions associated with a bolt carrier used with a rifle that fires 5.56×45 mm rounds, wherein the rifle configured for firing the 7.62×39 mm round further comprises a barrel with a barrel extension for use with a 7.62×51 mm round and the barrel extension and the bolt are each configured for use with a 7.62×51 mm round except that a plurality of lugs of the barrel extension have a length in a front to rear direction of the rifle that is consistent with a bolt extension used with a 5.56×45 mm round and the bolt has a plurality of matting lugs that have a length in a front to rear direction of the rifle that is consistent with a bolt used with a 5.56×45 mm round, the lengths of the lugs of the barrel extension being less than corresponding lengths used in a bolt extension and used with a 7.62×51 mm round.

2. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter structurally reinforces the front of the lower receiver.

3. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter is constructed out of steel while the lower receiver is constructed out of aluminum.

4. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter is

configured to engage a front tab of the magazine when it is inserted into the magazine well.

5. The rifle as in claim 4, further comprising a magazine catch pivotally mounted to the lower receiver proximate to the magazine well such that a protrusion of the magazine catch engages a rear lug of the magazine when it is inserted into the magazine well.

6. The rifle as in claim 5, further comprising a positioning plate located in the magazine well, the positioning plate being configured to locate the magazine in the magazine well.

7. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter is constructed out of steel while the lower receiver is constructed out of aluminum.

8. The rifle as in claim 4, further comprising a magazine catch pivotally mounted to the lower receiver proximate to the magazine well such that a protrusion of the magazine catch engages a rear lug of the magazine when it is inserted into the magazine well, wherein a portion of the magazine catch extends outwardly in front of and below a trigger guard of the lower receiver.

9. The rifle as in claim 8, wherein pivotal movement of the magazine catch allows the magazine to be pivoted into the magazine well from the adapter and into the magazine well such that a rear lug of the magazine is engaged by the protrusion of the magazine catch when the magazine is pivoted into the magazine well.

10. The rifle as in claim 9, wherein the magazine well of the lower receiver extends at least 2 inches in a vertical direction and the magazine is configured to have a curved shape.

11. The rifle as in claim 1, wherein a pair of feed lips are located on a top portion of the magazine and wherein a bottom portion of the bolt carrier is configured to have a pair of cuts such that the pair of feed lips will pass through the pair of cuts as the bolt carrier moves within the rifle.

12. The rifle as in claim 11, wherein the inside diameter of the bolt carrier is 0.563 inches while an outside diameter of the bolt is 0.556 inches.

13. The rifle as in claim 1, wherein the inside diameter of the bolt carrier is a range of 0.53 to 0.66 inches and the outside diameter of the bolt is in the range of 0.52 inches to 0.650 inches.

14. The rifle as in claim 1, wherein a width of the lugs of the barrel extension and the bolt is increased in a direction perpendicular to the lengths of the lugs.

15. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter is configured to have a feed ramp configured to direct rounds towards a feed ramp of a barrel extension of the rifle.

16. A rifle configured for firing a 7.62×39 mm round, comprising: an upper receiver; a lower receiver, the upper receiver being removably secured to the lower receiver, wherein the lower receiver removably receives and secures a magazine therein, the magazine holds at least 30 rounds of a 7.62×39 mm ammunition; and a bolt received within a bolt carrier and wherein at least the bolt and the bolt carrier have dimensions associated with a bolt and a bolt carrier used with a rifle that fires a 7.62×31 mm round and wherein a magazine well of the lower receiver receives an adapter at a front of the lower receiver wherein the adapter has a feed ramp to direct rounds towards a feed ramp

of a barrel extension of the rifle, and wherein the feed ramp of the adapter further comprises a pair of cuts for left and right positioned rounds as they exit the magazine.

17. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter has a pair of complementary features configured to be received within grooves located in sidewalls of the magazine well.

18. The rifle as in claim 1, wherein a magazine well of the lower receiver is configured to receive an adapter at a front of the lower receiver wherein the adapter has a pair of openings and associated flanges positioned to receive a front lug of the upper receiver that the upper receiver to be removably secured to the lower receiver via a takedown pin.