

B.I.T. Enterprises

Montana Buckaroo

A youth model, single shot, bolt-action .22 Caliber rifle

To be manufactured pursuant to the
Montana Firearms Freedom Act
by
B.I.T. Enterprises
P.O. Box 16106
Missoula, Montana 59808

Design characteristics

Action type. Several different action types were considered, included break-open, falling-block, and bolt-action. A bolt-action design with a manually-operated cocking device was selected both because of its suitability for young shooters and because of simplicity of production.

Models. Many different models were reviewed for design suitability. The brands/models under final consideration for design influence for the Buckaroo included:

1. Chipmunk (now produced as the Crickett);
2. Remington Model 514;
3. Winchester Model 67A; and
4. Remington Model 33. (in order in the photo below, top to bottom)



Since the Crickett is currently in production and current patents may apply, it is used only for general evaluation of size, shape and weight. The Remington 514, an adult-sized rifle, was manufactured from 1948 until 1971, so no patents should apply to that

mechanism. The Winchester 67A, an adult-sized rifle, was originally patented by John M. Browning in 1899 and manufactured from 1934 to 1963, so no patents should apply to that mechanism. The Remington Model 33, an adult-sized rifle, was produced from 1933 to 1935, so no patents should apply to the mechanism.

The Winchester 67A was selected as the model mechanism for the Buckaroo because of the simplicity of the mechanism for manufacture. The 67 must be manually cocked, but the bolt does not contain either extractor or ejector. Those functions are performed by a U-shaped, attached piece that also works in conjunction with the trigger as a sear. The trigger is actually pinned into the stock, and is mounted independently of the action. Further, the action (the cylinder in which the bolt travels) on the 67 is not separate, but is merely a drilled-out and cut-away section of the barrel, which would make production that much more simple.

Concerning the Winchester Model 67A, see:

<http://www.remington.com/products/archived/rimfire/bolt-action/model-33.aspx>

The 1889 John Browning patent is attached as **Exhibit A**

Model Designation - "Montana Buckaroo"

This Made-in-Montana, .22 rimfire, single shot, bolt action, youth model rifle is designated as the "Montana Buckaroo."

Sources/Plans

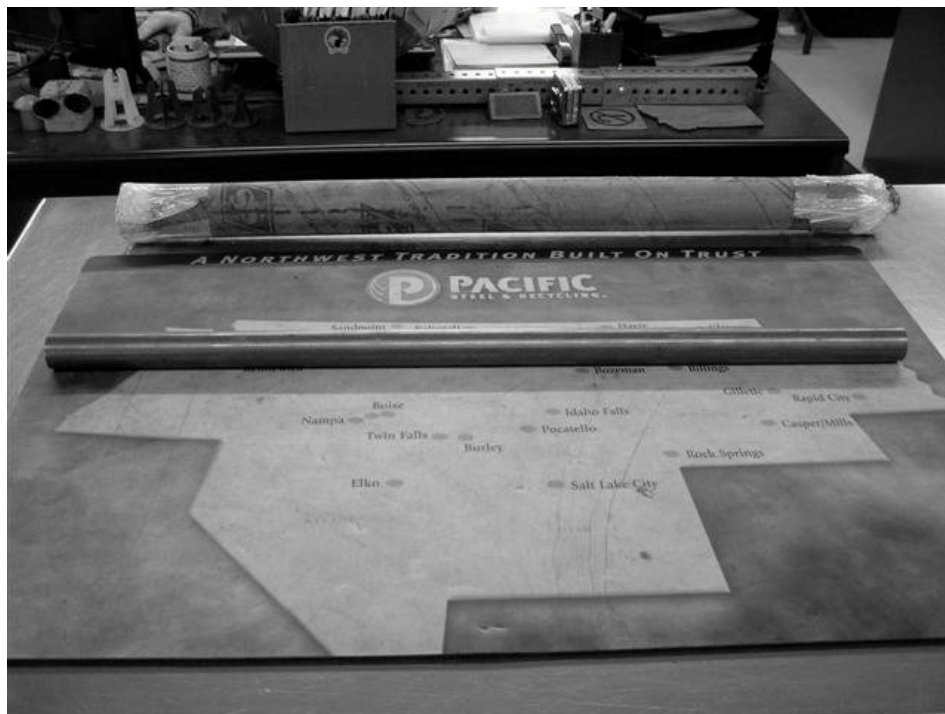
Richard Celata of KT Ordnance in Dillon will provide detailed plans and computer readable shop drawings for the Buckaroo based on the size and weight of the Chipmunk and the mechanics of the Winchester Model 67A. A Winchester Model 67A sample is on hand for reverse engineering of the parts used by Winchester until 1963 in this 1899 patent by John Browning.

See the attached **Exhibits B-1 through B-6** for the mechanical, MasterCad renderings of the Montana Buckaroo. These specifications are on hand as machine-readable computer code, ready to load into computer-controlled machining equipment for production.

Dan Lilja of Lilja Rifle Barrels in Plains, Montana will bore and rifle standard 1" round steel stock off the shelf at Pacific Steel, 2828 Palmer Street, Missoula, for barrels for the Buckaroo. For the pilot project, a 24" piece of 1" cold-rolled steel was obtained from Pacific Steel in Missoula.

The receipt is attached as **Exhibit C**.

Here is what the raw, 1" cold-rolled steel looked like on the sales counter at Pacific:



This steel was then shipped to Lilja Rifle Barrels to be bored and rifled for .22 Rimfire. See the attached **Exhibit D**, a letter from Gary Marbut to Lilja Rifle Barrels ordering the work on this stock steel.

Also see the attached **Exhibit E**, an invoice from Lilja Rifle Barrels for this work.

Here is what this steel (now barrel) looks like on its return from Lilja:



This photo is looking on-end at this to-be Buckaroo rifle barrel:



Pyramid Lumber company of Seeley Lake will provide high-density Pine wood with a guaranteed Montana pedigree for Buckaroo stocks.

Randy Stemple, co-owner of Hellgate Tool Repair, 2006 North Avenue West, Missoula, will provide a "stock duplicator," a mechanized pantographic machine for making gunstocks from raw wood and an example model.

Monte Koppes, owner of Double R Machine, 1326 Skalkaho Hwy, Hamilton, will apply his high-pressure water jet steel cutting equipment and process to cut out and manufacture the trigger and the extractor/ejector/sear element essential to the Buckaroo action.

Randy Jones, owner of Bitterroot Tool & Machine LLC, Stevensville, will bore/ream the barrels for the bolt inclusion and ejection port cutouts, and manufacture four necessary parts for the bolt. Randy will also fabricate the leaf spring that tensions the extractor/ejector/sear element, and front and rear sights.

Other springs, screws and pins, and the barrel mounting stud will be obtained as common hardware on the open market, consistent with the MFFA.

Custom Packaging, 1200 Shakespear St., Missoula, will provide the boxes and other packaging material for packaging the finished products.

Stocks are to be made and finished and Buckaroos assembled, stamped "Made in Montana" and sold by Gary Marbut, dba B.I.T. Enterprises, P.O. Box 16106, Missoula, Montana.

Market for the Montana Buckaroo. One contract for production and delivery of a single Montana Buckaroo has been entered into, conditioned upon validation of the MFFA. See attached **Exhibit F**. Waiting customers for about 500 Buckaroos are already identified. See attached emails as **Exhibit G**.

Dated this 31st day of March, 2010

Gary Marbut, Owner
B.I.T. Enterprises