



# COLT ARMY CONVERSIONS

## ODDS & ENDS

### Part 3

The Gold Standard - How do Measurements of Modern 1860 Cap & Ballers or their Conversions Compare to Originals?

By Long Johns Wolf



1

Evolution of Model 1860 Army factory conversions using Belgian Centaures (top down): factory engraved "1860 NEW MODEL ARMY" #12322, Nedbal Thuer #7266, Nedbal Richards #4079, and Nedbal Richards-Mason #6176.

This is the time to ask which repros are close to the specifications to that gold standard set by the original Colt Armies from yesteryear. Are our measurements of the 1<sup>st</sup> generation and period conversions within the ranges provided by R. Bruce McDowell in his sought after "conversion bible" from 1997 titled A STUDY OF COLT CONVERSIONS AND OTHER PERCUSSION REVOLVERS? What is the impact of production tolerances back then and today?

To answer these questions for C&B and conversion pistols alike in a reasonable way, measurements were taken in a standardized man-

Table 1	
1860 Army-Type C&B Pistols - Sample	
Reference: Colt 1860 Army (production 1860 - 1870s)	
Centaure 1960 Civilian & RNMA's (production 1960 - 1972)	
2nd gen Colt 1860 Army	
3rd gen Colt 1860 Army	
Italian 1860 Clones	

ner with digital calipers. This task could be accomplished within a short period of time thanks to the help of the FROCS community around the globe. Below are the critical areas measured and eventually compared:

- front diameter of the cylinder
- rebate diameter of the cylinder
- overall height of the barrel lug

Table 2	
1860 Army-Type Conversion Pistols - Sample	
Reference: Colt 1860 Thuer, Richards, RM conversion (production late 1860s - 1870s)	
Dave Anderson USPPFA Richards Conversion	
Kenny Howell 2 <sup>nd</sup> gen Colt 1860 Richards Conversion	
Nedbal Centaure 1960 Thuer, Richards & RM Conversions	
Nedbal Uberti 1860 Thuer Conversion	
Uberti 1860 Army Richards Transitional (RM) & RM Conversions	
Other Modern 1860 Conversions	

**Working assumptions:** A healthy human eye will note differences of ca. 0,5 mm/.02 in in size of comparable objects.

1. Deviations within these ranges are considered "regular production tolerances" (RPTs), or not significant.

2. Deviations beyond RPTs are considered significant.

They are printed in bold face type in the tables below.

The numbers in brackets in the Serial Number column indicate the number of pistols per manufacturer measured. Numbers in that same column without brackets are serial numbers of individual guns.

When more than 1 gun was available from a manufacturer measurements were averaged, to take into account production tolerances. Ranges of the measurements

are provided as appropriate.

Measurements of 1<sup>st</sup> gen. Colt Army pistols are printed in **blue/red** bold type.

Blue \* marked data is from McDowell's book.

Deviations above RPTs are what we refer to as "beefed-up" or "on steroids."

Table 3				
Make & Figure (Serial Model Army 1860)	Serial Number	Cylinder Diameter Front	Cylinder Diameter Rebate	Barrel Lug Height
Centaure 1960 RNMA	avg (9)	40,071,000	38,701,000	47,001,000
	range	40,071,001 - 41,001,013	38,301,000 - 38,901,011	47,001,000 - 47,001,000
Colt 1860 Army 1 <sup>st</sup> gen	avg (12)	41,001,000	39,501,000	47,001,000
	range	41,001,001 - 41,001,003	39,501,000 - 39,501,000	47,001,000 - 47,001,000
Colt 1860 Army 2 <sup>nd</sup> gen	avg (12)	40,001,000	38,001,000	47,001,000
	range	40,001,001 - 40,001,002	38,001,000 - 38,001,000	47,001,000 - 47,001,000
Colt 1860 Army 3 <sup>rd</sup> gen	avg (12)	40,001,000	38,001,000	47,001,000
	range	40,001,001 - 40,001,002	38,001,000 - 38,001,000	47,001,000 - 47,001,000
Thuer 1860 Army	avg (4)	40,001,000	38,001,000	47,001,000
	range	40,001,001 - 40,001,002	38,001,000 - 38,001,000	47,001,000 - 47,001,000

This 1860 Army data above indicates that most measurements from modern C&B 1860 model revolvers are within RPTs if we accept that only 3 originals were at hand for reference. If that is okay, one should also note the very close tolerances of these 1<sup>st</sup> generation Colts! Please, note some selective comments regarding brands or manufacturers below.

- Centaures front & rebate diameters are below RPTs
- 2<sup>nd</sup> gen. Colts barrel lug height ranges are below RPTs
- 3<sup>rd</sup> gen. Colt barrel lug height is below RPTs
- Euroarms barrel lug height is above RPTs
- Pietta front cylinder diameters are below RPTs
- Uberti front cylinder and barrel lug height ranges are below, the rebate cylinder diameter ranges above RPTs.

**Thuer Armies:** Only a small sample of four Thuers was available for measurements, two original Colts, and two Nedbal conversions, see table below. Therefore, only a few careful comments. The measurements of the two Nedbal conversions are almost identical. This was

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expected regarding their cylinders because they were copied from the same original in his collection. Some additional details:

Table 4

Facts & Figures (units)	Serial Number	Cylinder Diameter Front	Cylinder Diameter Rebate	Barrel Lug Height
Colt 1849 Army Thuer	Average (2)	41.219.602	39.109.542	47.287.602
Nedbal Centaure 1890 Thuer	12946	40.899.602	38.729.585	47.019.690
Nedbal Uberti 1880 Thuer	14289	40.899.602	38.829.629	46.829.691

- Colts' rebate cylinder diameter is above RPTs compared to the respective C&B originals
- The height of barrel lug of the Nedbal conversions is above RPTs of Colt Thuers but within reference C&B originals!



**"Richards Transitional":**  
4-screw frame, fluted cylinder  
(picture liberated from CAS-City forum)

whereas the Gren and R&D 2<sup>nd</sup> gen. Colts are off in one measurement only, but the Uberti RII (they don't make a RI) is pretty much beefed-up! Details regarding these significant deviations from the RPTs are listed below.

Table 5

Facts & Figures (units)	Serial Number	Cylinder Diameter Front	Cylinder Diameter Rebate	Barrel Lug Height
American USPFA 1890 Richards	1900	41.079.602	39.079.602	47.209.602
Colt 1849 Army Thuer	Average (2)	41.219.602	39.109.542	47.287.602
Colt 1849 Army Richards	Average (2)	41.219.602	39.109.542	47.287.602
Gren Col 2 <sup>nd</sup> gen Richards	Average (2)	41.219.602	39.109.542	47.287.602
Howell Col 2 <sup>nd</sup> gen Richards	1898	41.219.602	39.109.542	47.287.602
Nedbal Centaure 1890 Richards	12946	40.899.602	38.729.585	47.019.690
R&D Col 2 <sup>nd</sup> gen Richards	1978	41.219.602	39.109.542	47.287.602
Uberti 1880 Richards II	109444	42.449.071	40.309.602	48.509.990

Here are a few specific comments regarding the above measurements and pictures of rare and not so rare modern Richards custom and factory conversions.

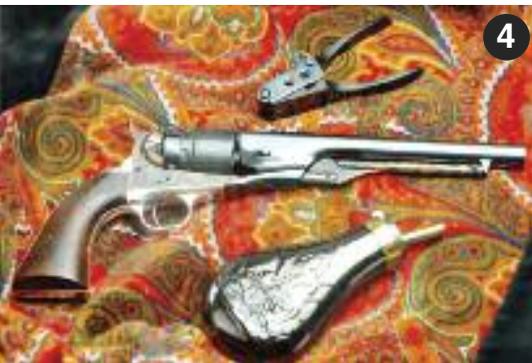
- USPFA Richards is within ranges of originals
- Gren 2<sup>nd</sup> gen Colt rebate cylinder diameters are below RPTs
- R&D 2<sup>nd</sup> gen Colt front cylinder diameter is below RPTs
- beefed-up Uberti RII in all 3 measurements!



Close-up of Nedbal Uberti Thuer Army



Nedbal Centaure Thuer Army



HEGE Thuer Army made from Uberti parts



USPFA Richards



Nedbal Uberti Richards:  
note 4-screw frame



Nedbal Uberti Richards:  
note 4-screw frame



Uberti factory Richards II

**Caveat Regarding Modern Colt Breech Loading Army Conversions.** According to the research of the late R. Bruce McDowell, please note a few important findings. You may want to consider them when looking for a modern period correct conversion.

- Armies with 8" barrels, three-screw frames and rebated cylinders only were subject to factory conversions.
- No factory converted short barrelled, or four-screw frame or fluted cylinder Armies are known to exist.

**Richards Armies:** We are comforted that the specs of the four originals from the 1870s are within RPTs, like those of their C&B brothers. The Anderson, Centaure, and Howell 2<sup>nd</sup> gen. Colt conversions are within RPTs;

(Continued on page 44)

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## Colt Army Conversions (Odds & Ends) pt. 3 . . .

(Continued from page 43)

**Richards-Mason Army:** We only have the McDowell data for reference. Regretfully, he is offering no measurements for barrel lug height.

Table 6

Model/Manufacturer	Serial Number	Cylinder Diameter (Inch)	Cylinder Diameter (Rounds)	Barrel Lug Height
Colt 1860 Army RM	average	0.281/0.282	0.281/0.282	0.4
Colt Centaure 1860 RM	6176	0.284/0.285	0.282/0.287	0.500/0.511
David 1860 RM	20971	0.284/0.281	0.280/0.278	0.440/0.465

Also, no data of original RMs could be provided by any of the FROCS members around the globe. Here are the findings:

- While the forward area of both Centaure & Uberti RM cylinders are beefed-up...
- the Centaure is OK in the other two measurements, but the Uberti is beefed up in all three departments!

Go figure.

**Conclusions:** So, where is all this measuring and comparing getting us? These are my subjective conclusions:



Two modern .44 Colt caliber Richards-Mason Army conversions: Centaure RNMA #6176 converted in 2009 by Nedbal (top), and Uberti #X02711 assembled in 2002 (bottom)

- According to our sample, the majority of 1<sup>st</sup> generation Colt 1860 Armies were built with close production tolerances.
- Contrary to opinions voiced elsewhere, this applies to their modern clones and re-issues as well.
- If the objective of your conver-

strap, grip and frame including small parts can be used. Frame needs to have steel plate welded to the lower forward portion to get one straight platform without the typical Army C&B pistol step; see picture below. A loading gate must be added. Hammer needs to be reworked and a firing pin added, similar to RM project.

2. Uberti **steel trigger-guard** needs to be mated to Belgian frame, back-strap and grip. Alternatively the Centaure brass TG must be blackened.

3. New **conversion cylinder** needs to be lathed from ordnance steel. No big deal for a conversion artist.

4. Semi-finished **Uberti barrel** in .44 cal./.429 dia needs to be



Original Colt Open Top

sion project is historical or dimensional correctness rather, of a safe, reliable shooting iron, the quality of the steel used for both the base gun and newly manufactured conversion barrel/liner & cylinder becomes THE key issue.

- Belgian Centaures are made of harder steel than Italian C&B pistols.
- Historically and dimensionally correct conversion pistols are not available off the rack, only custom made!
- To me, this page helps to rationalize my prejudices and preferences vis-à-vis the best wifey of them all to get financial funds sanctioned for my Centaure conversions!

**"Yes we can":** Some consider the **Model 1871-1872 Open Top** the queen of the Colt conversions. With the experience already gathered from other Centaure conversion projects, it appears the way is now paved for the making of a **Centaure Open Top** with Army grips in .44 Colt caliber using many original Belgian parts. Here is the shopping list and a rough outline of such a project:

1. Original Centaure back-

procured, re-contoured and fitted; see RM project.

5. New **OT ejector housing** needs to be made and mated to barrel; see RM project.

Compared to the previous Centaure Army Richards-Mason conversion project, such a Centaure Open Top will have even more Italian genes.

Will I pursue such a Centaure Open Top project? Maybe, maybe not. Certainly not before Karl Nedbal has completed the Centaure Richards Transitional by the end of March 2011... and he accepts the task to do an Open Top for me ... and last but not least the War Department permitting, of course!

Finally given the options available to own a modern, hard steel and quality made 1860 model conversion revolver with measurements of a Civil War period Colt Army and with due respect to my friends in Gardone, I will be choosing the Centaure customs conversion in .44 Colt caliber every day of the week.

*If you like to know more about these Belgian cousins of the Hartford Colt Army 1860 visit [www.1960nma.org](http://www.1960nma.org).*

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