

REMINGTON ARMS COMPANY, INC.
Firearms Research Division

May 7, 1981

Xc: C.B. Workman

MINUTES OF MEETING

MODEL 700 COST ANALYSIS

May 4, 1981

A meeting was held on Monday, May 4, 1981 to discuss means of reducing costs of the Model 700. The following were in attendance:

T.L. Capeletti	J.S. Martin
R.J. Balaska	E.R. Owens
J.W. Brooks	K.C. Rowlands
J.A. Lawrence	J.R. Snedeker
F.E. Martin	J.W. Bower

Stock Assembly

The stock assembly accounts for 40% (\$34.95) of the 700's cost. Of this figure, 41% is for the walnut blank, 39% is labor related, and 20% is included as direct expense. The following alternatives were discussed as cost reductions:

- o Laminate walnut stocks to decrease drying time.
- o Laminate a higher grade walnut on the outsides of the stock with lesser grades of walnut sandwiched between them.
- o Investigate synthetic stocks for a "Hunter's Grade" gun.
- o Investigate alternative woods (cherry, maple, etc.).
- o Investigate producing a walnut grain on lesser woods or composites using embossing, photo film, veneer or shrink wrap.

Stock Processing

- o Redesign stock to reduce handwork.
- o Automate stock sanding.
- o Eliminate the cheekpiece, grip cap and fore end tip.
- o Utilize an insert to simplify the action cuts in the stock.
- o Investigate checkering inserts.
- o Stain fore end tips and grip caps rather than using a different material for them.

Stock Processing Continued

- o Mount fore end tips and grip caps on the stock blank before machining to decrease hand finishing.
- o Investigate an alternative to RK-W finishing.

Barrel and Receiver Assembly

The barrel and receiver account for 22% (\$19.33) of the 700's cost. Cost of material is 23%, labor is 45%, and 32% is direct expense.

These alternatives were discussed:

- o Change the receiver shape to facilitate machining.
- o Retain hammer marks on the barrel.
- o Investment casting the receiver.
- o Forge the receiver.
- o Investigate a Kevlar barrel with a steel liner.
- o Include the locking lugs in the barrel, simplifying the receiver.
- o Make the receiver with a nylon insert similar to the Nylon 66.
- o Replace the feeding mechanism with a box or plastic insert.
- o Investigate powder metal investment casting for the receiver.
- o Offer sights or scope mounts with the rifle at the customer's preference.

Bolt Assembly

8% of cost

- o Investigate forging the bolt.
- o Investigate investment casting.
- o Investigate a two piece forged bolt (lengthwise)
- o Investigate a powder metal bolt handle.

Trigger Guard Assembly

7% of cost

- o Replace cast trigger guard with plastic.
- o Investigate Vytel for the magazine spring.
- o Plastic magazine follower.

High spot process and material estimates of these alternatives are to be completed by Process Research. Upon completion, these estimates will be circulated to the committee.

J.A. Lawrence,
for the Committee

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Firearms Research Division