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NEW BOLT ACTION CENTER FIRE RIFLE PRODUCT/FEATURIZATION DEVELOPMENT RESEARCH

PLAINTIFF'S EXHIBIT

FOR: REMINGTON ARMS COMPANY, INC.

BY: THE GEDIMAN RESEARCH GROUP, INC.

APRIL, 1985.

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TABLE OF CONTENTS

1
5
-
2
5 8
22
25
29
31
34
37
38
40
3 3

APPENDIX



SUMMARY OF RESULTS (CONT'D)

4. RESPONDENTS CLEARLY PREFER THE MAGAZINE BOX LOADING
SYSTEM FOR CONVENIENCES (OF EASY LOADING-AND-UNLOADING)
AND THE OPPORTUNITY TO CARRY AN EXTRA "CLIP."

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- 5. MAINLY FOR FUNCTIONAL REASONS (I.E., PREVENTION OF ACCIDENTAL SNAGGING AND LIFTING OF THE BOLT). THE GREAT MAJORITY OF RESPONDENTS PREFER A RIFLE WITH A BOLT LOCK OVER ONE WITHOUT. OF THE TWO BOLT LOCK DESIGNS, MOST RESPONDENTS PREFER THE ONE WHICH LOCKS ON "SAFE" ONLY—BOTH AS A DOUBLE-CHECK TO MAKE SURE THE GUN IS ON "SAFE" AND ALSO FOR ITS "SIMPLER" MECHANISM (I.E., ONE LESS THING TO GO WRONG).
 - NOTE, HOWEVER, THAT THERE IS A
 RELATIVELY LOW DEGREE OF RESPONDENT
 AWARENESS AND COGNITION (ESPECIALLY
 CONCERNING THE "RELEASE" MECHANISM)
 REGARDING BOLT LOCKS; THUS, SOME
 EDUCATION MAY BE DESIRABLE TO ENSURE
 CONSUMER FAMILIARITY AND COMFORT WITH
 THE BOLT LOCK:
- FOR CONVENIENCE AND EASE OF ACCESS, THE BOLT LOCK RELEASE LOCATED ON THE BOLT PLUG (MODEL R) IS MARGINALLY PREFERRED.
 - THE MAIN OBJECTION TO THE LOCATION OF MODEL M (SIDE OF RECEIVER) IS ITS PROXIMITY TO THE SAFETY -- MAKING IT DIFFICULT TO OPERATE, PARTICULARLY WITH GLOVES ON.







CONFIDENTIAL PRESENCE AND TYPE OF BOLT LOCK

FOR BOTH FUNCTIONAL AND SAFETY REASONS, THE GREAT MAJORITY OF RESPONDENTS (EXCLUDING PHOENIX) PREFER A RIFLE WITH A BOLT LOCK TO ONE WITHOUT.*

PRESENCE OF BOLT LOCK	LIKED BEST BEFORE DISCUSSION (56)	LIKED BEST AFTER DISCUSSION (56)
PREFER A BOLT LOCK	72%	79%
PREFER NO BOLT LOCK AT ALL	28	21

RESPONDENTS CITE SEVERAL ADVANTAGES TO HAVING A BOLT LOCK:

- IT PREVENTS ACCIDENTAL SNAGGING ON A TWIG AND LIFTING OF THE BOLT, UNBEKNOWNST TO THE HUNTER. THUS POSSIBLY RESULTING IN A MISSED OPPORTUNITY.
- IT PREVENTS THE BOLT FROM OPENING AND DIRT FROM GETTING INTO THE MECHANISM IN THE EVENT OF A FALL.
- SOME ALSO SEE IT AS A SAFETY FEATURE (I.E., KIDS CANNOT OPEN THE BOLT AND LOAD THE GUN).





^{*} IT SHOULD BE NOTED THAT THERE IS A RELATIVELY LOW LEVEL OF CONSUMER AWARENESS AND COGNITION REGARDING BOLT LOCKS. IN THE GROUPS A CERTAIN AMOUNT OF (COMPRESSED) "EDUCATION" WAS REQUIRED BEFORE THE TEST ISSUES COULD BE MEANINGFULLY DISCUSSED.

PRESENCE AND TYPE OF BOLT LOCK (CONT'D)

- "WITHOUT THE BOLT LOCK, IF YOU'RE CLIMBING ON ROCK OR THROUGH BRUSH AND YOUR BOLT GETS INADVERTENTLY KNOCKED PARTIALLY UP, YOU CAN'T FIRE THAT WEAPON."
- "I GO DEER HUNTING BEFORE THE SUN COMES UP AND I ROUTINELY TAKE TUMBLES. I FALL DOWN A HILLSIDE AND WIND UP AT THE BOTTOM WITH MY BOLT HANGING OPEN, AND YOU GET A BUNCH OF CRAP IN THERE."
- "IF A YOUNGSTER IS FOOLING WITH A GUN THAT HAS THE BOLT LOCKED IN BOTH POSITIONS, CHANCES ARE HE WON'T KNOW HOW TO LOAD IT, SO IT'S SAFE."

ON THE OTHER HAND, MANY RESPONDENTS (IN PHOENIX*) PREFER NO BOLT LOCK AT ALL.

- SEVERAL SIMPLY ARE NOT AWARE OF THE ISSUE AND SEE NO NEED FOR A BOLT LOCK (WHATEVER IT IS).
- Some FEEL IT IS "JUST ANOTHER GIMMICK" OR "GADGET TO GO WRONG."
- A SMALL NUMBER OF RESPONDENTS FEEL THAT HAVING TO PRESS A RELEASE BUTTON TO OPEN THE BOLT SLOWS DOWN THE LOADING PROCESS AND "SAVES THE DEER."

"I REALLY DON'T SEE THE PURPOSE OF A BOLT LOCK AT ALL."

"THIS [BOLT LOCK] IS JUST ANOTHER GADGET TO GO WRONG."

TO SOME EXTENT THIS CAN BE ATTRIBUTED TO THE LACK OF EXPLANATION GIVEN IN THE PHOENIX GROUPS FOR THE RATIONALE AND OPERATION OF THE BOLT LOCK MECHANISM.

NTBOOK220

CONFIDENTIAL

OF THE TWO BOLT LOCK DESIGNS, MOST RESPONDENTS PREFER THE BOLT LOCK THAT LOCKS ON "SAFE" ONLY.

÷	LIKED BEST BEFORE DISCUSSION (40)*	LIKED BEST AFTER DISCUSSION (44)*	- Jan
TYPE OF BOLT LOCK		£	
M LOCKS ON "SAFE" ONLY	63%	61%	
R LOCKS ON BOTH "SAFE" AND "FIRE"	37	39	

THEY FEEL THAT THE BOLT LOCK THAT LOCKS ON THE "SAFE" POSITION ONLY IS FUNCTIONALLY SUPERIOR. IN THAT:

- MANY WOULD USE IT AS A "DOUBLE CHECK" TO MAKE SURE THE GUN IS ON "SAFE."
- SEVERAL FEEL THAT LOCKING THE BOLT IN THE "FIRE" POSITION IS UNNECESSARY (THE GUN SHOULD BE STATIONARY WHEN IN THE "FIRE" POSITION).
- THE SYSTEM THAT LOCKS ON BOTH "SAFE" AND "FIRE" IS PERCEIVED BY SOME TO BE MORE LIKELY TO HAVE MECHANICAL TROUBLE THAN A BOLT LOCK THAT LOCKS IN ONE POSITION.
 - ... "JUST ANOTHER THING TO GO WRONG."
 - "AS LONG AS THAT BOLT IS DOWN AND LOCKED.
 THEN I KNOW MY SAFETY IS ON."
 - "I'M GENERALLY NOT CRAWLING THROUGH THE BRUSH WITH THE SAFETY ON FIRE. WHEN I'VE GOT IT IN THE FIRE POSITION, I'M READY TO FIRE."
 - "A BOLT LOCK IN THE FIRE POSITION IS JUST ANOTHER THING TO GO WRONG. I'D RATHER HAVE IT SIMPLE."

^{*} BASED ON RESPONDENTS WHO PREFER A ROLT LOCK.



CONFERENCE!

PRESENCE AND TYPE OF BOLT LOCK (CONT'D)

STILL, SEVERAL RESPONDENTS (PARTICULARLY IN HOUSTON) PREFER THE BOLT LOCK THAT LOCKS IN BOTH POSITIONS, MAINLY FOR SAFETY REASONS:

> "THE SAFER THEY ARE, THE BETTER... I-HAVE A SON. AND IT DOESN'T SEEM LIKE IT'S GOING TO DETER FROM USING THE GUN.

- IT IS IMPORTANT TO NOTE THAT CONSUMER COGNITION OF THE BOLT LOCK RELEASE MECHANISM IS PARTICULARY WEAK. AS THE FOLLOWING VERBATIMS ILLUSTRATE, MANY RESPONDENTS DO NOT PICK UP ON THE FACT THAT THE BOLT CAN EASILY BE OPENED AT WILL:

> "I DON'T WANT THE LOCK. BECAUSE THEN YOU CAN HAVE THE SAFETY ON AND STILL BE ABLE TO GET THE ROUND OUT."

"I DON'T WANT IT LOCKED IN BOTH-POSITIONS. BECAUSE THEN YOU CAN'T GET THE ROUND OUT OF THE CHAMBER."

"IF THE BOLT IS LOCKED IN BOTH POSITIONS AND YOU ASSUME THE GUN IS UNLOADED. THE TENDENCY IS TO SQUEEZE THE TRIGGER TO OPEN THAT BOLT.

CONSUMER EDUCATION IS REQUIRED IN THIS AREA. CONSUMERS NEED TO BE MADE AWARE OF THE FACT THAT THE BOLT LOCK CAN BE RELEASED AT ANY TIME, WITHOUT ADJUSTING THE POSITION OF THE SAFETY OR SQUEEZING THE TRIGGER.



CONFIDENTIAL PRESENCE AND TYPE OF BOLT LOCK

LOCATION OF BOLT LOCK RELEASE

A BOLT LOCK RELEASE LOCATED RIGHT ON THE BOLT PLUG (MODEL R) IS PREFERRED OVER A RELEASE LOCATED ON THE SIDE OF THE RECEIVER (MODEL M). RESPONDENTS PREFER THE SHROUD LOCATION FOR CONVENIENCE AND EASE OF ACCESS.

	LIKED BEST BEFORE DISCUSSION (56)	LIKED BEST AFTER DISCUSSION (56)
LOCATION OF BOLT LOCK RELEASE		
R BOLT PLUG	55%	54%
M SIDE OF RECEIVER	/43	44
No PREFERENCE	2	2

⁻ THE MAIN OBJECTION TO MODEL M IS ITS PROXIMITY-TO THE SAFETY...

...MAKING IT ESPECIALLY DIFFICULT TO OPERATE WITH GLOVES ON

- SOME SAY THAT THE LOCATION OF MODEL R IS EASIER TO REACH WITH THE SIDE OF THE THUMB.

...BUTTON CAN BE PRESSED AND BOLT LIFTED IN ONE MOTION

COMPRESSION



PRESENCE AND TYPE OF BOLT LOCK

LOCATION OF BOLT LOCK RELEASE (CONT'D)

- "I CHOSE R BECAUSE M IS TOO CLOSE TO THE SAFETY. THERE'S TOO MANY BUTTONS TOO CLOSE TOGETHER."
- "YOU WON'T BE ABLE TO REACH THE BUTTON ON M WITH GLOVES ON. IT'S TOO CLOSE TO THE SAFETY."
- "I PICKED R BECAUSE I COULD DO IT IN ONE MOTION -- PUSH THE BUTTON AND PULL THE BOLT UP AT THE SAME TIME. IT'S MORE CONVENIENT."

NEVERTHELESS, SOME RESPONDENTS PREFER THE LOCATION OF MODEL M FOR READY ACCESSIBILITY...

"I LIKED M BECAUSE ITS EASIER TO OPERATE.
YOU HAVE YOUR HAND RIGHT THERE."

"I LIKED M BECAUSE I COULD REACH IT WITH MY THUMB."







SAFETY LOCATION

FOR CONVENIENCE/ACCESSIBILITY REASONS AND PERSONAL SAFETY (WHICH TO A LARGE DEGREE IS SEEN TO BE RELATED TO THE TYPE OF SAFETY MECHANISM), RESPONDENTS PREFER THE STANDARD BDL SAFETY BY NEARLY A THREE TO ONE MARGIN OVER THE TANG MOUNTED SAFETY.

SAFETY LOCATION	LIKED BEST BEFORE DISCUSSION (56)	LIKED BEST AFTER DISCUSSION (56)
R STANDARD BDL (SIDE OF RECEIVER)	77%	71%
S TANG MOUNTED	23	29

- THE SIDE OF THE RECEIVER IS SEEN AS THE "NATURAL POSITION" FOR THE SAFETY. MOST RESPONDENTS FEEL IT IS MORE ACCESSIBLE.

... SOME SAY IT IS MORE MANEUVERABLE AS WELL

- IN CONTRAST, THE TANG LOCATION IS VIEWED AS AN AWKWARD, "UNNATURAL" POSITION THAT IS MORE DIFFICULT TO REACH...

... ESPECIALLY WITH GLOVES ON







SAFETY LOCATION (CONT'D)

- "I LIKED R. MYSELF. IT'S READILY . . . ACCESSIBLE. IT'S EASY TO GET TO."
- "THE WAY I HOLD THE GUN. (THE LOCATION OF) R SEEMS MORE NATURAL TO ME. MY THUMB CAN MANEUVER BETTER."
- "I DIDN'T LIKE THAT ONE ON THE TAME. IT SEEMED LIKE YOU HAVE TO COME WAY BACK TO GET TO IT. IT'S A LITTLE MORE UNNATURAL FOR ME."
- "IF YOU'RE OUT IN THE COLD WEATHER AND WEARING A PAIR OF GLOVES, YOU'RE GOING TO HAVE A HECK OF A TIME GETTING TO THAT ONE ON THE TANG."

ALTHOUGH SOMEWHAT LESS IMPORTANT THAN THE CONVENIENCE ISSUE, MANY RESPONDENTS CITE PERSONAL SAFETY AS A FACTOR IN THEIR PREFERENCE. IT IS IMPORTANT TO NOTE, THOUGH, THAT THE PERSONAL SAFETY ISSUE IS MORE OF FUNCTION OF THE TYPE OR DESIGN OF THE EXTERNAL MECHANISM (FLAT SLIDE SWITCH VERSUS PROTRUDING LEVER) THAN OF ITS LOCATION.

- SEVERAL MEN OBJECT TO THE SLIDE SWITCH MECHANISM OF MODEL S (WHICH SOME FEEL IS UNAVOIDABLE IN A TANG MOUNTED SAFETY). THEY ARE CONCERNED THAT IT MAY BE DIFFICULT TO DISTINGUISH BETWEEN POSITIONS...
 - ... AND PARTICULARLY DIFFICULT TO DISTINGUISH BY "FEEL"
- SOME RESPONDENTS STATE THAT THE TANG SAFETY (BECAUSE OF IT'S LOCATION) IS MORE LIKELY TO BE ACCIDENTALLY DISENGAGED BY THE CARRIER'S HAND, ESPECIALLY WHEN THE GUN IS CARRIED BY THE PISTOL GRIP, AS IT OFTEN IS.



NTBOOK226

SAFETY LOCATION (CONT'D)

- "I PICKED R BECAUSE I BELIEVE THERE SHOULD NEVER BE A QUESTION AS TO WHETHER THE SAFETY IS ON OR NOT. I WANT A DEFINITE POSITION RATHER THAN JUST A SLIP UP AND A SLIP BACK."
- "I COULDN'T SEPARATE THE DESIGN OF THE SWITCH [FROM] THE LOCATION. WITH IT IN THE BACK, IT HAD TO BE A LOW PROFILE TO BE PRACTICAL, AND TO ME THAT'S BAD."
- "WITH R, YOU DON'T HAVE TO ACTUALLY LOOK AT THE GUN TO SEE IF IT'S ON SAFETY. YOU CAN FEEL IT. I DON'T THINK YOU CAN DO THAT WITH S."
- "WHEN YOU'RE WALKING THROUGH THE FIELD HOLDING THAT GUN [MODEL S]. YOU COULD [ACCIDENTALLY] SLIDE THE SAFETY INTO THE FIRE POSITION USING YOUR THUMB...VERY UNSAFE."

NEVERTHELESS. SOME CONVINCING ARGUMENTS ARE MADE IN FAVOR OF A TANG MOUNTED SAFETY ON THE GROUNDS OF ACCESSIBILITY. SAFETY.

AND FUNCTION:

- FOR CONVENIENCE/ACCESSIBILITY REASONS, THE TANG SAFETY IS MORE ATTRACTIVE TO SOME HUNTERS (PARTICULARLY LEFT HANDED SHOOTERS): THE THUMB "NEVER HAS TO LEAVE THE SHOOTING POSITION."
- WITH REGARD TO SAFETY, SOME MEN FEEL THAT THE LOCATION (AND SLIDE SWITCH MECHANISM) OF THE TANG SAFETY MAKES IT LESS LIKELY TO ACCIDENTALLY BECOME DISENGAGED BY TREES OR BRUSH.
- OTHER REASONS (SINGLE MENTIONS) GIVEN IN SUPPORT OF THE TANG SAFETY (BASED MORE ON THE MECHANISM THAN THE LOCATION) INCLUDE ITS SMALL SIZE, QUIETNESS, AND "ENCLOSURE OF THE ACTION."

COMPLETE

NTBOOK227

SAFETY LOCATION (CONT'D)

"I LIKE THE TANG SAFETY BETTER. THERE'S LESS THUMB MOVEMENT."

"ON [MODEL] R YOU CAN BRUSH IT ON A BUSH OR A TREE AND KICK IT OFF SAFETY AND ON TO FIRE. THE SLIDE SWITCH MAY BE A LITTLE SAFER BECAUSE IT'S NOT AS ACCESSIBLE."

"THE PROBLEM WITH [MODEL] R IS THAT [WITH THE LEVER]. THERE IS A FAIRLY LARGER OPENING DOWN TO THE MECHANISM WHERE DIRT OR MOISTURE CAN GET IN."



Confirmal

APPENDIX

FEATURE PREFERENCES

	•	Before D	iscussion	After Discussion
		Net Score*	Liked Best	Liked Best
			(56)	(56)
(1)	Stock Configuration			
	Q Standard BDL	9.5	44%	44%
	T Mountain rifle	6	25	25
	S Prototype #1	(-5)	16	16
	R Prototype #2	(-6.5)**	15**	15**
(2)	Receiver Styles	•		
~	Q Round receiver with integral mounts	14.5	35%	42%
· **	T Round receiver	(-4)	21	23
·	S Octagonal receiver with integral mounts	(-4.5)	20	17
	R Octoagonal receiver	(-6)	20	18
•	No preference	The second secon	4	
(3)	Barrel Styles	jarok 1		
<u></u>	Q Standard contour	15	56%	57%
	T Mountain rifle contour	-11	30	32
	-S-Mountain-rifle/hammer-marked_	(-25)	. 14	11
(4)	Floor Plate/Magazine Styles***			
	R Magazine box		71%	73%
	T Floor plate		25	25
	No preference		4	23
(5)	A. Presence/Type of Bolt Lock***			
	M, R Prefer a Bolt lock (net)		72%	70%
	T Prefer no bolt lock at all	**		79%
	M Locks on "safe" only		45	`
	R Locks on "safe" and "fire"		27	49 30
	B. Location of Bolt Lock Release**	kake,	~- 1	30
	R Bolt plug		55%	54%
	M Side of receiver	_	43	
	No preference	*	2	44
	4 ,		4	2

^{*} Net score = Liked best minus Liked least.

** Higher in Phoenix.

*** Net score cannot be computed.



FEATURE PREFERENCES (cont'd)

	Before Discussion		After Discussion
	Net Score*	Liked Best	Liked Best
(6) Bolt Release Location ***		(56)	(56)
S Side of receiver	:	66%	59%**
Q Standard EDL		34	41
(7) A. Bolt Plua Styles ***			
S. R. M Fully enclosed		54%	59%
T Standard BDL exposed		46	41
B. Enclosed Bolt Plug Style			
M BDL style fully enclosed	22	64%	66%
R Fully enclosed, short scallops	(-9)	13**	13**
S Fully enclosed, scallops	(-12)	23	21
(8) Bolt Handle Styles	y+5% +		
M Standard BDL	27.5	52%	44%
T Teardrop	16.5	· 29	29
Q Standard ADL	-(-2.5)	8	
R Oval polished	(-2.5)	6	6
S Faceted	(-35)	5	4
(9) Safety Location ***			•
R Standard BDL		77%	71%
S Tang mounted		23	29
	. •	•	•



^{*} Net score = Liked best minus Liked least.

** Higher in Phoenix.

*** Net score cannot be computed

DEMOGRAPHICS OF SAMPLE

*	Total Sample	Phoenix	Denver	Houston
	(56)	(20)	(18)	(18)
Area				
Phoenix	36%	100%	-%	-%
Denver	32	_	100	
Houston	32	<u>-</u>	-	100
Days Hunted With Bolt-Actio Center Fire Rifle in Past 12 Months				
5 or less	25%	30%	22%	22%
6 - 10	31	20	33	39
11 - 15	25	15	33	28
16 or more	. 19	35	12	11
Number of Guns Owned	•		4	
1 - 3	25%	15%	22%	38%
4 - 6	25	20	28	28
7 - 10	18	20	28	6
11 or more	32	45	22	7 28
Brand of Bolt Action Center Fire Rifle(s) owned*				
Remington	66%	70%	65%	EC#
Winchester	18	20	11	56%
Ruger	16	20	22	22
Springfield	13	5	28	6
Mouser	13	20	11	6
Savage	13 ^	20	6	6 11
Weatherby	5	5	6	A ^a
Sako	5	,	0 11	6 6
Other	14	20	6	17

^{*}Multiple responses





