

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE



xc: J.W. Bower
F.H. Smith

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" _____

April 26, 1985

TO: R.S. Murphy

FROM: F.E. Martin

DROP TESTING OF THE NBAR

Drop testing of the NBAR as originally designed and assembled was not possible. The sear-trigger angle used did not allow the trigger to be adjusted to the minimum pull weight of 3 pounds.

A developmental test program was proposed. The sear-trigger angle was changed from the original 27° angle to a 41° 30' angle and the trigger spring was redesigned. Testing started with trigger pulls set at 3 pounds and drops started (butt drop) at 1 inch increments to a height of 30 inches.

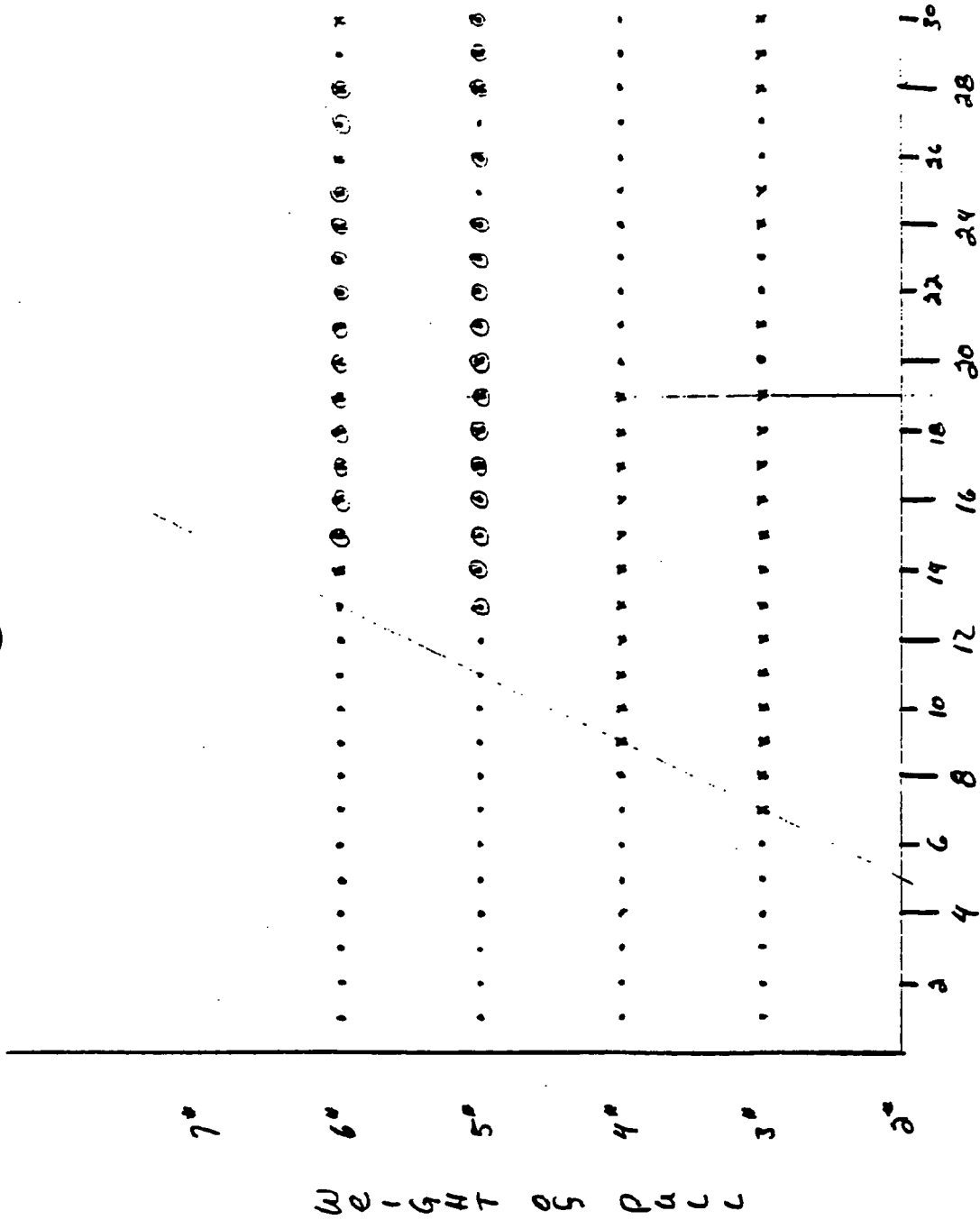
Results were recorded - see attached graphs.

The 41° 30' angle did not give us the results desired, withstanding an 18" drop without firing.

To try to accomplish this goal it was decided to try a 51° sear trigger angle and again it was necessary to redesign the trigger spring to obtain both min and max trigger pull. As can be seen from the attached graphs, neither angle obtained the desired criterion of withstanding a butt drop from 18 inches.

Further development work is being done via layout, redesign of components, spring changes and computer evaluation.

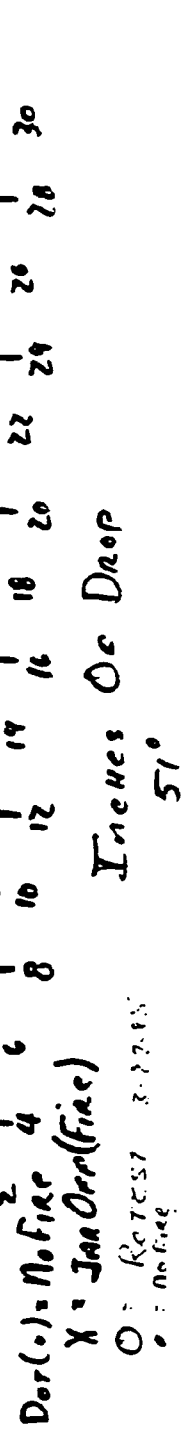
FEM:sps
Attach.



Dot(•) = No Fire
 X = Jar Off Fire
 O = Reverse
 INCHES OF DROP
 41° 30' SEAN ANGLES

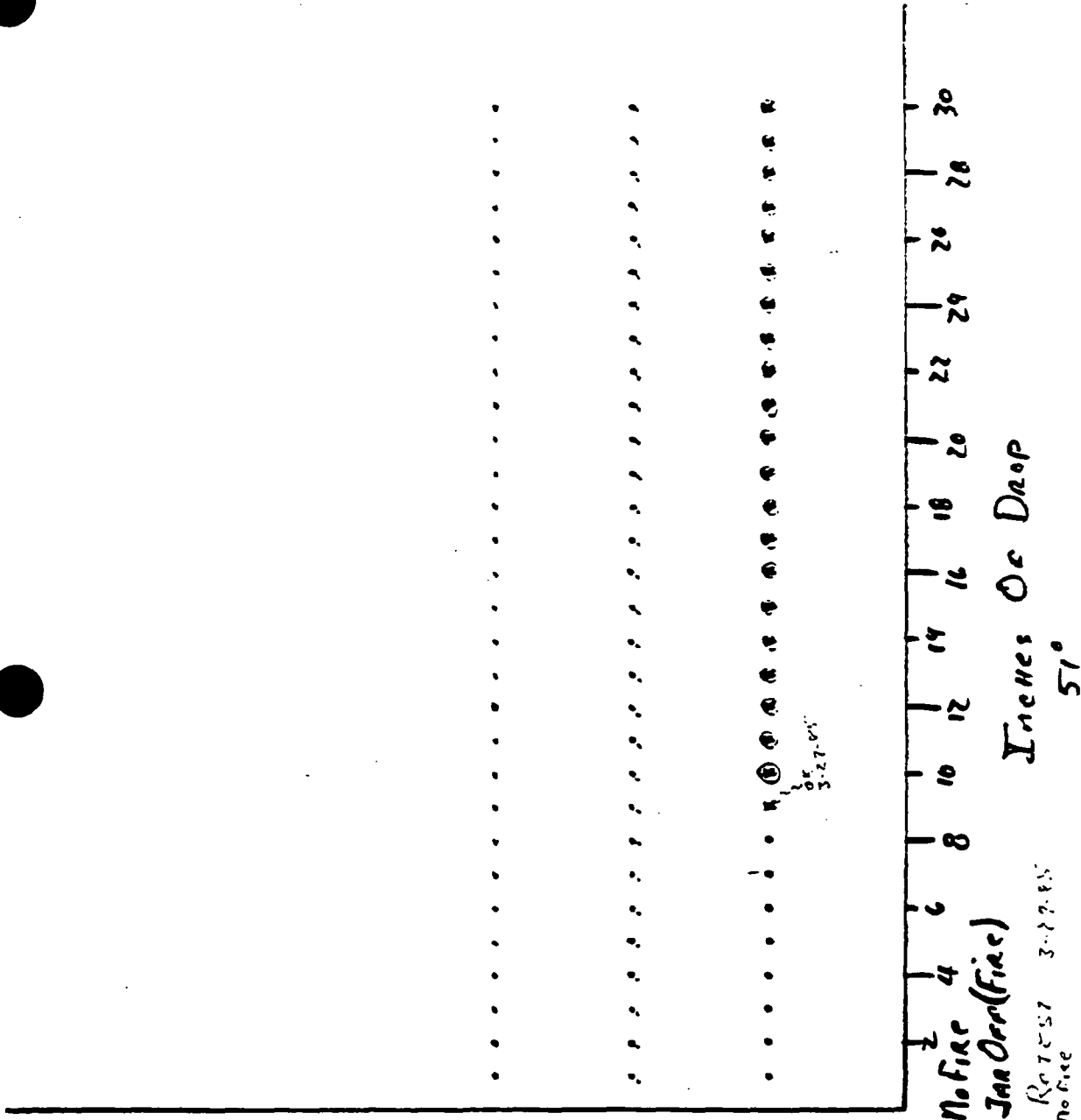
W E I G H T I N P O U N D S

7" 6" 5" 4" 3" 2"



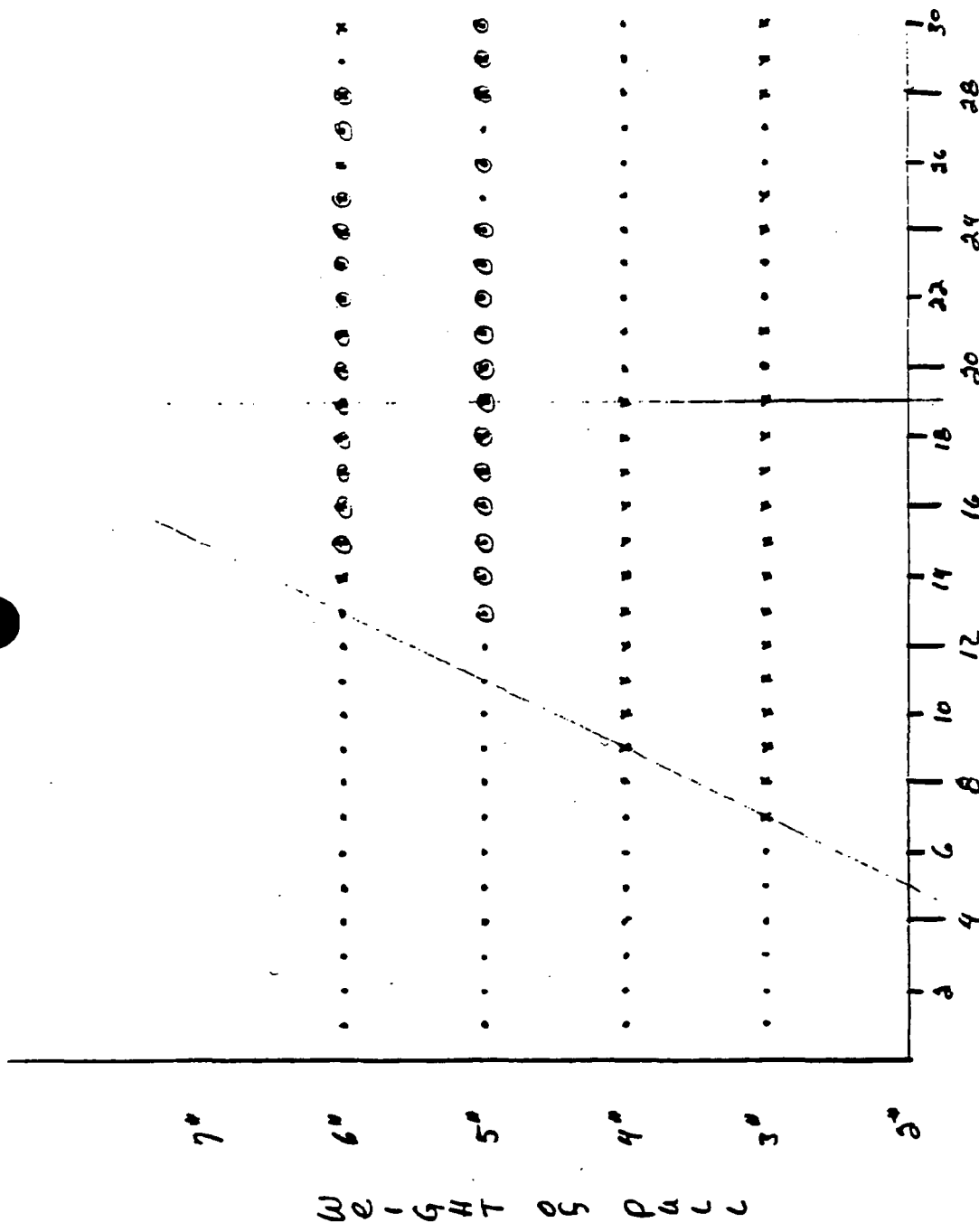
WEIGHT IS PUL

7" 6" 5" 4" 3" 3"



Dor(-) No Fire
X = Jan Orr (Fire)

O = RCT 57 3-27-85
o = no fire



Dot(•) = No fire
 X = Jar Off fire
 O = Reverse
 INCHES OF DROP
 41° 30' SEAN ANGLES

7"

6"

5"

4"

3"

3"

WEIGHT IS PUL

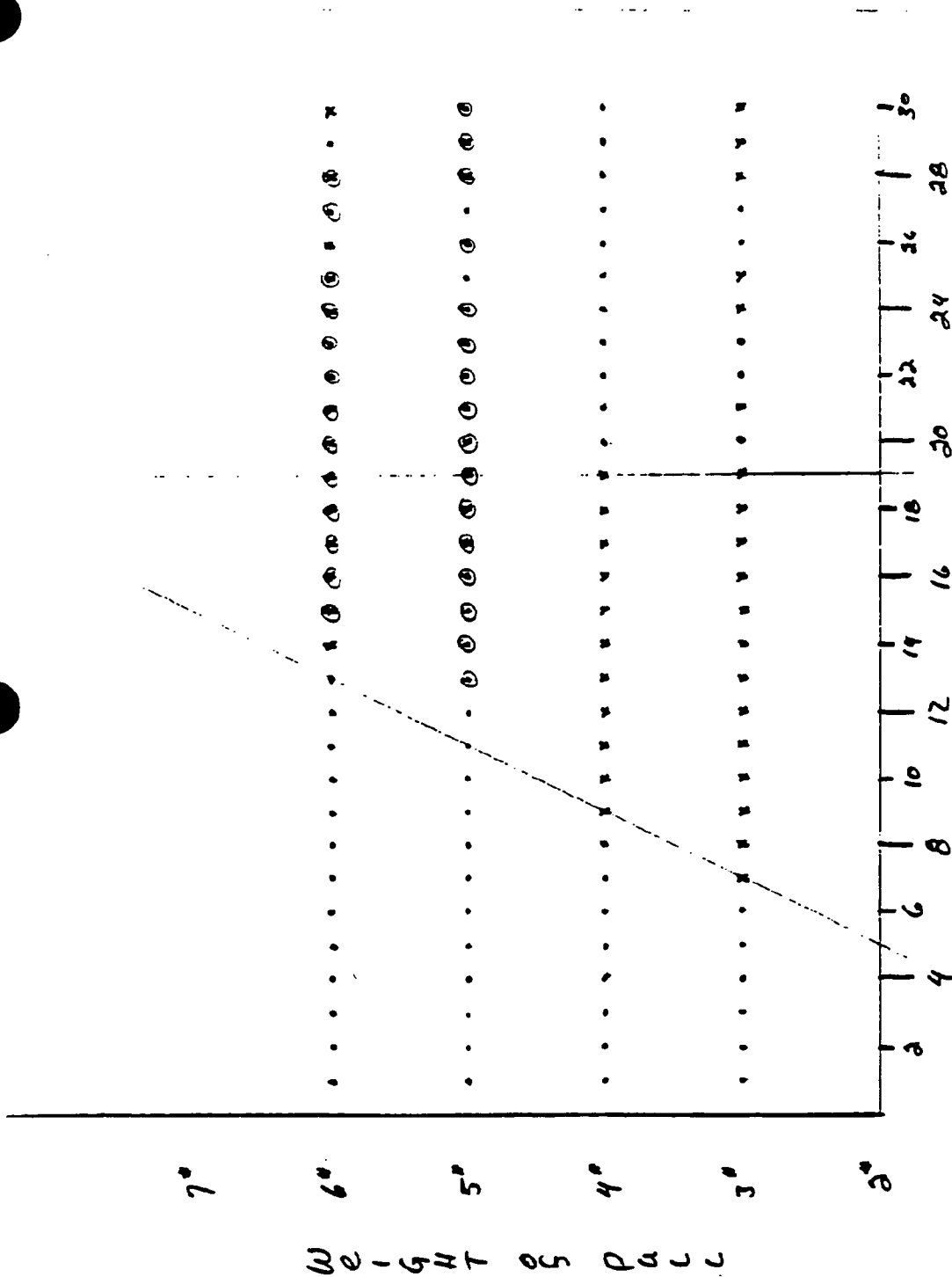
Dot(.) = No Fire
X = Jar Off (Fire)

O = Ret 51 3-27-68
o = No Fire

Inches Or Drop
51"

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

3-27-68



Dot(•) = No Fire
 X = Jaw Open Fire
 O = Reverse
 Inches Or Drop
 41°30' Senn Angle

Product Introductions - Firearms

1986

Choke Tubes in Model 870 and Model 1100

- o Standard
- o 26" SP Mag
- o Special Field
- o Sportsman 12

Model 870 and Model 1100 Special Purpose Deer Gun

Model 700 Mountain Rifle

Model 700 Varmint - 6MM

Sportsman 78-.223

Model 700 Classic - .264 Win. Mag.

1987

Model 1100 - Functional Improvements and Restyle (12 Ga.)

Model 870 - Functional Improvements and Restyle (12 Ga.)

20 Ga. Choke Tubes - Model 870 and Model 1100

Model 700 BDL - .338 Win. Mag.

Model 700 Short Action Left Hand

Sportsman 78 w/Custom Checkering

XP-100 - .223 Caliber

1988

New Bolt Action Rifle

Model 1100 Restyle (20, 28, .410)

Model 870 Restyle (20, 28, .410)

JWB:sps
4/29/85

REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington
REM

PETERS
P

xc: W.H. Coleman, II
J.W. Bower

File - SAAMI

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Ilion, New York
April 30, 1985

E.F. BARRETT

**PROPOSED ANSI/SAAMI STANDARD Z299.5-1984
ABUSIVE MISHANDLING**

The Ilion New Product Research - Firearms recommends the adopting and accepting of the proposed ANSI/SAAMI Standard dealing with Drop and Jar-off tests with harder drop matt and word changes as written.

A.A. Hugick

A.A. Hugick
New Products Research - Firearms
Technical Representative

AAH:js