

8.27.92
WAWRELEASE MECHANISMS

THINGS WE THINK WED LIKE
TO AVOID: ASSOCIATING BOLT STOP
FUNCTION OR LOCATION WITH ELEMENTS OF SAFETY
POSITION OR FIRING OF MECHANISM
BOLT STOP FUNCTION:

~~OR~~ RELEASE BY POLLING
~~TRIGGER~~ BEYOND NORMAL
SEAR RELEASE:

- HOW TO GET POSITIVE
OVERTRAVEL STOP?
- AVOID ASSOCIATING ANY FUNCTION
EXCEPT FIRING WITH TRIGGER
MANIPULATION.

RELEASE BY MOVING

~~SAFETY~~ ACTUATION MEANS
(TO EXTREME STROKE BEYOND
NORMAL POSITIONS) M581-S

- ~~AVOID~~ USING SAFETY FOR
MORE THAN FIRE/NO FIRE,
MULTIPLE POSITIONS,
• ~~AVOID~~ MOVE OUT OF SAFE
CONDITION TO REMOVE
A (POSSIBLY CLOSED) BOLT.

RELEASE BY ACTUATING
OTHER MEANS WHICH IS
PART OF RELEASE MECHANISM:

(M700, M725):

- NO INTRINSIC ADVANTAGE
TO THIS.

+ THE DEMONSTRATED REPRODUCIBLE
~~REALITY~~ OF TEST RESULTS

INFLUENCE THE "REALITY" OF REPRODUCIBLE
TEST RESULTS BECOME A STRONGER DRIVER
~~OF WEIGHTS~~ ^{THE} "REALITY" OF CUSTOMER PERCEPTION.

HIGH CONVENIENCE OF INTENTIONAL
OPERATION WITH REDUCED
LIKELIHOOD OF ~~UN~~ INADVERTENT
ACTIONS.

DEGREE OF ADJUSTABILITY

WHERE MADE

NO
ADJUSTMENTS

FACTORY
ONLY
ONE
TIME
DEDICATED
LOCKED
THERMOP
NON-ADJUST-
ABLE

FACTORY
ONLY
PROPERLY
MEANS
TO
ADJUST
tools
screws
ETC.

FACTORY
FIRST
TO
ADJUST
CUSTOM
GUNSMITH

FACTORY

DEDICATED
ONE
TIME
ONLY
BT
NATURE
ADJUSTABLE
'BOLONY
STONES'

ADJUSTING
GUNSMITH
ADJUSTING
GUNSMITH

NOT OF
POLY

O.T.

IN 6 ALUMINUM (CINER)

SERVICE CENTER

TALENTED AMATEUR

UNSKILLED AMATEUR

MORON

ASSUMED

PRIORITIES

- ① M700 SENDER THRUPTUP
(PROACTIVE) SPECS
COMPLETION: ^{SUCCESSFUL} END OF APRIL
- ② ACTIVITIES ON (LONG LEAD
TIME) ITEMS FOR VETS
(CONTRACTS? OCTOBER?)

DEFINE

W③ NBAR F.C. CONTROL.

FORM

SYSTEM CONFIGURATION
DEFINED.

OUTPUT
NBAR

TIME TABLE
F.C. CONTROL.

^{TIME TABLE}

ON DEFINITION OF

NOW

TIME TABLE ON TIME TABLE

SUB GAINS

~~TIME TABLE~~ OF FINAL WORK
~~TIME TABLE~~

ULTIMATE: TIME TABLE ON DEFINITION
OF F.C.

PRIOR NBAR REVIEW

WHY WAS PRIOR DESIGN ACTIVITY (AROUND 200-300 SYSTEMS?)
OR WAS IT UNSATISFACTORY?
COMPETITIVE PRODUCT REVIEW

^{SOURCES} SYSTEM CONFIGURATION

STRENGTHS / WEAKNESSES

- IN-DEPTH LITERATURE REVIEW
S. OMBROW'S BOOK(S)
- LEGAL LITIGATION / AUTHOR DISTURBANCES
SUMMARIES — DISCARD ^{MARGINAL} MATERIALS
ON THEIR WITH VARIOUS DEFICIENCIES.

PROJECT

W. W. ALLEN

N BAR

Every other "minimum material removed"
CF receiver is a near lockup.

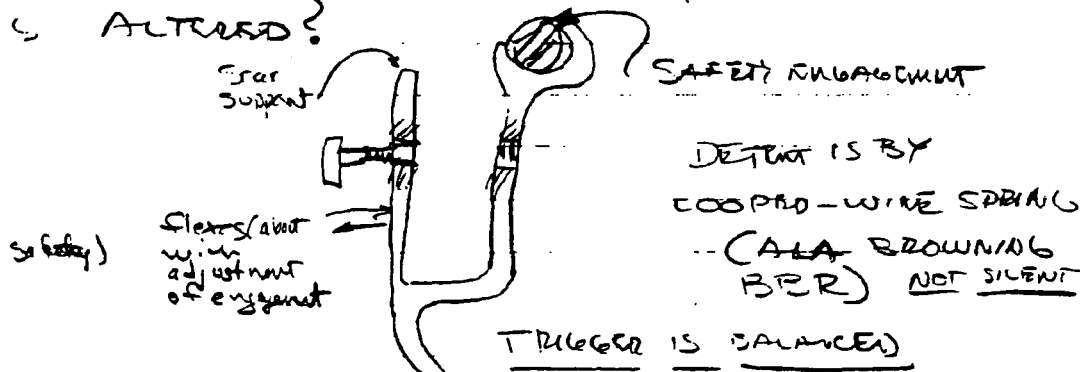
Avoid a "too heavy" preload
ON F.P. SPRING $\Rightarrow$ THIS LOAD IS
IMPOSED ON FIRE CONTROL DISENGAGEMENT SURFACES.

Avoid TETAS MAGNUM CONDITION:

- APPLYING SAFE (CROSSBUT) _____
IN FIRED CONDITION WILL NOT _____
ALLOW FIRING PIN TO RECOCK _____

BINDING NOTCHES IN HEAD OF
"LOST" SCREW(S) (RT? ENGAGEMENT)
90 PITCH WITH 12 $\Rightarrow$.002 ENGAGEMENT
STEPS.

HOW DO YOU ACCOMMODATE A
TRIGGER BLOCK SAFETY WITHOUT REQUIRING
AN ADJUSTMENT IF TRIGGER/SPRING ENGAGEMENT
IS ALTERED?



SILENCE OF LOOP WIRE SPRING
IN SAFETY OR BB & R77?

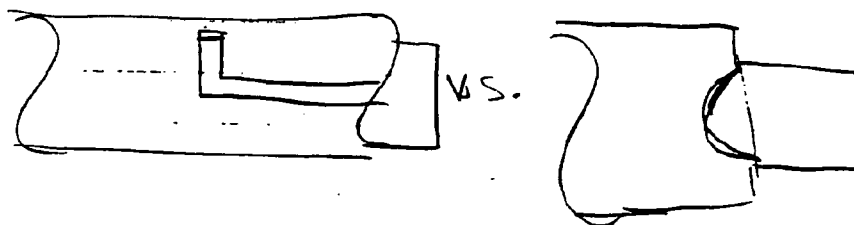
ROGER TANG SAFETY LACKED
LEVERAGE (MECH. ADVANTAGE) FOR CAM-BACK
TYPE OF FIRING PIN BLOCK SAFETY.

CAN WE ADD A "RESILIENT"
WEARS TO SEAR - INSTEAD OF TRIGGER.

- MUST BE CORRECTLY POSITIONED
BE ACTION OF
PUT "CONNECTOR" ON THE SEAR

1) BAR

ESCAPE RAMP FOR BOLT STOP
plunger avoid - L CUT FOR BOLT
LOCKDOWN VOL II pg 165



BOTH ROGER M77 AND CHAMPAIN
REQUIRED REMOVABLE F.P. SPRING PLUNGES
WITH SOLID (INTEGRAL) ONES.

TEST REQUIREMENTS

WILL EXCEED SAME
DROP TEST FOR NEW PRODUCT
BY CONSIDERABLE MARGIN.

EQUAL TO OR BETTER THAN M100
DROP TEST PERFORMANCE

GOALS

CONSUMER ADJUSTABLE

STRATEGY

- "GRIP" SAFETY
- TRIGGER - TRIGGER (LOCK)

DEFINITION OF NEW SYSTEM

NO MENTION MADE OF INTERNAL BOLT/REC CONCEPT - NOT A DESIGN

- TWO POSITION SAFETY
SIMPLEST, REMINGTON TRADITION, EASY TO UNDERSTAND
- BOLT LOCK ON SAFE
- ++ • RELEASEABLE BOLT LOCK — ^{DONT NEED ~~pulling~~}
"OPTIONAL"
ALLOWS OPENING BOLT WITH SAFETY "ON"
- WILL BLOCK AND LIFT SEAR AS
PRIMARY MEANS
- COULD BLOCK TRIGGER ALSO
→ NOT SAFER AS SUCH, BUT THIS
MAY ADDRESS CUSTOMER PERCEPTION
THAT IT IS BETTER IF TRIGGER DOESNT
MOVE.
- CONSIDERING VERTICALLY SLIDING
SEAR
- SELF-CONTAINED SUB-ASS'Y MOUNTED
RIGIDLY TO RECEIVER
- DIVORCE BOLT STOP/RELEASE FROM
INSIDE TRIGGER BOW; NO OTHER REASON
TO REACH INSIDE TR. GUARD BOW BUT
TO PULL THE TRIGGER.

WAW

8.10.13

IF BOLT LOCK / BOLT STOP ARE COMMON / INTER-RELATED PARTS, THEN IT SHOULD BE DONE IN A WAY THAT USER CAN ELECT NOT TO HAVE BOLT ~~LOCK~~ LOCK FUNCTION BUT RETAIN BOLT STOP FUNCTION.

- @ FACTORY
- @ GUNSMITH
- @ SELF

BEST WAY WOULD ~~XXX~~
INVOLVE ^{NOT} REMOVING A PART

COST / MISPLACED
• THEN DIFFICULT TO RESTORE OTHER MODE.

FOR MINIMUM (FLOOR) ON TRIGGER
ROLL :

• DUAL SPRING SYSTEM

- 1 FIXED MINIMUM PERMANENT INSTALLATION @ ASS'T.
- 1 ADDITIVE FOR ADJUSTMENT

- SINGLE SPRING; WITH MINIMUM PRELOAD MAINTAINED WHEN ADJUSTMENT IS COMPLETED TO MINIMUM EXTREME.

BROWNING BSA

- ACCESSIBLE WITHOUT RIFLE DISASSEMBLY
- ACCESSIBLE ONLY WITH RIFLE DISASSEMBLY.