

May 30, 1975

VOLUME VI - FIREARMS

The following proposed changes are submitted for review and consideration by the Firearms Technical Committee:

Section 10 - Accuracy

10.02, 10.03, 10.04 - Should the Max. average group size be listed in this manual? *Revised*

10.07 - The Sight picture should be such that the Front Sight is centered in the sighting plane. The top of the sight plane is then placed tangent to the bottom (6 o'clock) of an appropriate bull. This will be called the aiming point. With non-adjustable sights the bead should be centered to the highest point on breech or rib. No Sight pictures enclosed.

Section 20.02 - Firing Pin Indent Measurement Procedure

Equipment: .225 x .300 Copper Crusher  
Hardness: R.H. 250 to 60 (1/8 Ball 60 kg. wt.) *Revised*

20.03 - Firing Pin Indent - Center Fire Rifle

If the major variables of headspace, temperature and eccentricity of blow are considered, minimum indents in center fire rifles with a .060 inch to .080 inch diameter approximately hemispherical Firing Pin, per prescribed procedure, should be .017 inch in order to insure against misfires chargeable to the firearm.

If adequate Firing Pin protrusion is available, say a minimum of .040 inch, the .017 inch minimum indent will allow for headspace up to .010 inch over minimum, temperatures to -10°F, of Firing Pin blows misplaced .015 inch.

Section 20.02 - Cont'd.

20.03 - Firing Pin Indent - Center Fire Rifle - Cont'd.

If firearms are to be used in extremely low temperatures, the mechanism, particularly the Firing Pin and associated parts, should be cleaned and lubricated with a lubricant suited to low temperatures.

20.11 - Firing Pin Indent - Shotgun

If the major variables of headspace, temperature, and eccentricity of blow are considered, minimum indents in shotguns with a 0.100 inch diameter approximately hemispherical Firing Pin, per described procedure, should be .013 inch in order to insure against misfires chargeable to the firearm. If adequate Firing Pin protrusion is available, say a minimum of .040 inch, the .013 inch minimum indent will allow for headspace up to .010 over minimum, temperatures to -10°F, or Firing Pin blows misplaced .015 inch.

If firearms are to be used in extremely low temperatures, the mechanism, particularly the Firing Pin and associated parts, should be cleaned and lubricated with a lubricant suited to low temperatures.

20.14 - Firing Pin Indent - Rim Fire

If the major variables of headspace, temperature and misplacement of blow are considered, minimum indents in .22 Rim Fire Rifles with a Firing Pin .020 inch x .075 inch centered 0.125 inch from cartridge center in the prescribed rim fire indent plug should be .014. If adequate Firing Pin protrusion is available,

Section 20.02 - Cont'd.

20.14 - Firing Pin Indent - Rim Fire - Cont'd.

say a minimum of .030 inch, this indent would allow for headspace up to .004"

over minimum, temperatures to -10°F, of Firing Pin blows misplaced .013.

If firearms are to be used in extremely low temperatures, the mechanism, particularly the Firing Pin and associated parts, should be cleaned and lubricated with a lubricant suited to low temperatures.

Section 30 - Pistol & Revolver

30.02 - Delete "Fails-To-Fire" malfunction for pistols to conform with shotgun and rifles not allowing this malfunction.

Section 35 - Gun Repairs and Modifications

35.03 - Center Fire - Rifles, Pistols & Revolvers

1. Chambers with any diameter or length dimension - etc.

*Moved Section 40*

Section 60 - Patterns, shotshell

60.01 - Description of Shotgun Chokes

1. Definition. The constriction or decrease in bore diameter usually located near the muzzle of a smoothbore firearm (shotgun) designed for shooting shotshells.

Section 60 - Cont'd.

60.02 - Sight Picture

The Front Sight should be centered in the line of sight. A six o'clock hold, with line of sight tangent to bottom of any reasonable size bull, should be used. This will be called point of aim. No Sight picture enclosed.

Section 70

70.06 - Common Causes of Burst Shotgun Barrels

Bulged and/or burst barrels and serious injury to the shooter and/or spectators can result when a shell of a gauge smaller than that for which a shotgun is chambered is dropped into the bore or chamber and a shell of correct gauge fired behind it. The following tabulation lists some, but not all, of the combinations in which a smaller gauge shell can remain in the bore and act as an obstruction. The rim of the smaller gauge shell stops at the forcing cone or lead from the chamber to the bore, permitting the insertion of a shell of the proper gauge. The resultant bulge and/or burst centers at approximately 4-1/2 inches from the breech face.

Section 90 - Safety Operations

90.01 - The Safety should be operated in accordance with the manufacturer's instruction.

Section 90 - Cont'd.

90.01 - Safety Operation - Cont'd.

It is recommended that firearms Safety "on" and "off" position be clearly discernible to the user. The Safety position should be such that accidental disengagement is minimized. The mechanical operation of the Safety should not be impaired as a result of the application of a 30-lb. force to the trigger in any direction with the Safety applied. The gun should not fire due to these conditions.